# CATALOGUE

OF THE

# UNIVERSITY OF ARKANSAS.

TWENTY-SIXTH EDITION.

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1898-'99.

# .1899.

# 1900.

SMTWTFS	SMTWTFS	SMTWTFS
JANUARY.	JULY.	JANUARY.
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MARCH.	SEPTEMBER.	MARCH.
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# CALENDAR, 1899=1900.

#### FAYETTEVILLE.

1899.

SEPTEMBER 20, WEDNESDAY—First term begins. SEPTEMBER 20-23—Entrance examinations. NOVEMBER 30, THURSDAY—Thanksgiving, a holiday.

#### 1900.

JANUARY 26, FRIDAY—First term examinations begin. February 3, Saturday—First term ends. February 5, Monday—Second term begins. May 30, Wednesday—Decoration day, a holiday. June 7, Thursday—Second term examinations begin. June 4, Monday (?)—Decoration day, a holiday. June 17, Sunday—Baccalaureate sermon. June 21, Thursday—Annual commencement.

# MEDICAL DEPARTMENT, LITTLE ROCK. 1899.

OCTOBER 12, THURSDAY-Regular session begins.

1900.

APRIL 12, THURSDAY-Session ends.

# LAW DEPARTMENT, LITTLE ROCK. 1899.

OCTOBER 2, MONDAY-Fall term begins.

1900.

JANUARY 29, MONDAY—Fall term ends.

JANUARY 30, TUESDAY—Spring term begins.

MAY 31, THURSDAY—Spring term ends.

# BRANCH NORMAL COLLEGE, PINE BLUFF. 1899.

SEPTEMBER 5, TUESDAY—Session begins.

1900.

JUNE 1, FRIDAY-Session ends.

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JOHN FRANKLIN MOORE, B. S., Assistant Chemist.

GEORGE B. IRBY, B. A., Assistant Agriculturist at Newport.

# The University and the State.

The University is at the head of the public educational system of the State of Arkansas. It seeks to foster the higher educational interests of the State, broadly and generously interpreted, and to make provision for the demands of advanced scholarship in as many lines as its means will permit. It is the aim of its Faculty and Board of Trustees, from year to year, to bring it into still closer articulation with the public schools of the State, and in connection with them to afford to all the youth of either sex ample facilities for liberal education in literature, science, and the industrial arts, and for the professional studies.

Through the aid received from the United States and from the State of Arkansas, the University is enabled to offer to its students free funtion, except in the studies of Law. Me heine, and Music, and to open wide her doors to all seekers of learning.

The institution was established by virtue of an act of Congress donating public lands for educational purposes, and in accordance with an act of the General Assembly of the State of Arkansas.

# LOCATION.

The University, except its Medical and Law Schools and Branch Normal College, is located at Fayetteville, Washington County, Arkansas. Situated in the heart of the Ozark Mountains, it is more than 1,500 feet above the sea level. The location is thought to be unsurpassed in salubrity of climate, in beauty of surrounding scenery, in variety and perfection of agricultural and horticultural productions, and in the morality and intelligence of its people.

Students may reach Fayetteville from both the north and the south by the Texas branch of the St. Louis and San Francisco Railroad, which has three trains daily each way, and various connections with other roads both north and south.

## BUILDINGS.

University Hall.

This is a brick structure with cut stone trimmings and a stone foundation. It it four stories in height above the basement. It consists of a front

building 214 feet in length, and two wings, each 124 feet in depth, the whole forming three sides of a quadrangle. This building contains a large number of class rooms, Chapel, Library and Reading Room, separate Study Halls for the boys and girls of the Preparatory Department, Armory, Magazine, Band Room, Laboratories for Engineering, Biology and Geology, Music and Art Rooms, President's and Commandant's Offices, Natural History Museum, Examination Hall, Literary Society Halls, Toilet Rooms, etc., in all, seventy rooms, together with broad corndors and stairways. The building is heated by steam, lighted by elec-

tricity, and supplied with water from the city waterworks.

This building, designed especially for the departments of Chemistry and Hall. Physics, was erected in 1893; it is a substantial two-story brick building,

50 by 60 feet. On the first floor are the lecture rooms of the two departments, the physical laboratory and storerosam and also the private laboratory of the professor in charge. On the second floor are the chemical laboratories, including a laboratory for general chemistry, a laboratory for qualitative analysis, and a laboratory devoted to quantitative analysis, also a storeroom for chemical supplies, a weighing room, and a hallway. The building is supplied with gas, water, and steam heat, and with modern apphances for technical work. It will accommodate about 100 students.

Buchanan brick building, three stories high, and containing over forty rooms. It is favorably located, with a view to the health of the occupants, convenience of access to University Hall, and sightliness of appearance on the grounds. The rooms are large, well ventilated and lighted, and open into broad corridors extending lengthwise through the building. From a wide veranda in front, there are three entrances to the building. There are also two rear entrances, and on the third floor a suite of rooms fitted up for an

Infirmary. Through the generosity of the ladies of Fayetteville, this suite of rooms has been thoroughly equipped. In the rear of the Hall a brick building has been erected which furnishes bath and toilet rooms, supplied with cold and hot water.

The main building of the Agricultural Agricultural Experiment Station is of back, one Buildings. story in height. It contains several offices; the laboratories of the Chemist, the Horticulturist, and the Bacteriologist; the Station Museum, and several commodious storeroom. Belonging to the Department of Agriculture are a large barn, stock shed, dairy house, and other necessary outbuildings.

This structure is 60 by 23 feet, is Horticultural heated by steam, and supplied with Building. improved ventilating apparatus and other modern conveniences. Attached to this is a building 24 by 20 feet, which is designed to be used as a laboratory for plant study. The equipment thus provided turnishes much-needed facilities for study and research to all persons interested in plant life, and especially to students of horticulture.

The building is located north of University Hall, and, together with the improvement of the adjacent grounds, adds much to the sightliness of that part of the campus.

The Shops.

The shop building is of brick with stone foundation and iron roof, and has a floor space of 8,000 square feet. It contains a wood room 80 by 40, a

teindry 35 by 40, forge shops 32 by 40, a machine shop 40 by 48, and a boiler room 32 by 35. There is also a brick building 15 by 35, divided into two rooms, without communication, one of which is used for an efficient die other for the storage of oil and paint; also a frame coal bin 12 by 30, covered with iron and a ressible to teams from either side. The new buildings are heated by steam and provided with water from the city waterworks and with ire hose. They will accommodate about 100 students in class work at one time.

## THE LIBRARY.

The Library occupies the north wing of the main building, second floor. It now contains over 7.000 volumes, with numerous pamphlets, maps, charts, etc.—Shelves are provided for 14,000 volumes, with room for expansion.

The alcoves are separated from the library hall by an iron railing; and only advanced students are permitted to have direct access to the shelves. The general reference works, however, are outside the railing.

The Dewey decimal system of classification and the Cutter book-numbers are used, thereby simplifying the circulation of books and the general care of the Library. The leading high class periodicals (including magazines, reviews and various technical monthlies) are regularly taken, and are bound as they accumulate. This vast fund of current literature is rendered more useful and accessible by "Poole's Complete Index" to periodic literature from 1802 to the present time. A number of daily and weekly papers also come to the Library.

Among the works of general reference in the Library are all the best encyclopedias, and dictionaries.

The card catalogue in preparation will greatly facilitate reference and will also greatly increase the usefulness and popularity of the Library.

The privileges of the Library are free to all students.

There are also special libraries belonging to various departments, comprising some 1,500 volumes.

# THE ARMORY.

The Armory is a large, well lighted room, 60 by 80 feet, occupying the entire basement of the north wing of the main building. It is substantially fitted up with arm racks, compartments for equipments, and other conveniences. Two adjacent rooms are assigned to the Military Department, and are used as bandroom and storeroom.

The equipment of the department consists of 275 Springfield Cadet Rifles, of the same model as those used at the United States Military Academy

at West Point, 275 sets of infantry equipments, twenty-one cadet swords (West Point pattern, National colors, flags, signal equipment, ammunition, etc., and a superior set of band instruments.

The arms and equipments are furnished the University by the general government. The other equipments have been purchased by the University and belong to the Military Department. The equipment is sufficient for a battalion of 350 cadets.

# THE MUSEUM.

The Museum occupies the fourth floor of the south wing of the main building. Large additions have recently been made to its equipment with a view to facilitate instruction in geology, and also to make it of increased interest to the visiting public. That portion of the collection suitable for display is arranged in glass cases, while the working collection is in drawers. Four new sloping-top cases with drawers beneath have recently been added, thus affording space for several thousand specimens.

Relief Maps.—For illustration in geology, and general interest to the public, there have been placed in the Museum the following relief maps: Geological relief maps of the State of Arkansas, Colorado Canon, and the United States; a convex relief map of the United States on a section of a globe 16 feet in diameter; a relief map of Carmel Bay, California; Ice Spring Craters, Utah; Yosemite Valley, Palestine, Mount Vesuvius, the State of California,

and San Francisco Peninsula. A relief map of a portion of the State of Tennessee is now in preparation.

The Mineral Collection. The mineral collection contains about 2,000 specimens, representing the different mineral groups. Many of these specimens are displayed in cases.

The Petrographic Collection.—The most valuable part of this collection consists of the series furnished by the United States Geological Survey, representing sedimentary, igneous and metamorphic rocks. Besides this, there is a valuable collection of building and other stones from different parts of the country.

The Paleontological Collection. There is a large collection of fossils in the Museum, but as they have not yet been arranged and catalogued, the number of specimens cannot be even estimated.

The Major Earle Collection. Major F. R. Earle has deposited in the Museum his private collection of minerals and fossils. This collection was formerly in Cane Hill College.

The Zoological and Botanical Collection. This collection consists of 200 birds and mammals, representing 80 species; 200 reptiles and amphibians, representing 40 species; 1,500 fishes, representing 350 species; 1,000 insects and other invertebrates, representing 200 species; several skeletons.

Donations to the Museum will be gratefully acknowledged, and the donors may be sure that

anything of value sent to it will be carefully preserved and duly credited to the donor. Collections in the hands of private parties are likely to be soon scattered and destroyed through lack of care or improper handling. The Museum is now prepared to receive collections on deposit, and to preserve and display them under the owner's name until called for.

While our Museum is most important on account of its educational value, it at the same time serves an important purpose in representing the resources of this State.

## THE LABORATORIES.

In the laboratories of the University opportunities are afforded for practical instruction in Chemistry, Mineralogy, Physics, Botany, Zoölogy, Entomology, Horticulture, and in Civil, Mechanical, and Electrical Engineering.

The laboratories for chemical work

Chemical are four in number and are situated

Laboratories. in Science Hall. The Laboratory of
General Chemistry is furnished with

desks capable of accommodating thirty-five students.

Each desk has a cupboard and two drawers, and is
provided with gas and water. The Qualitative

Laboratory has desks for sixteen students. Each

desk is provided with suitable conveniences for taking care of apparatus, and is supplied with all the
common reagents. The room is provided with a

hood and other equipments usually found in qualitative laboratories. The Quantitative Laboratory has suitable accommodation for eight students, and beside the usual equipments, a Blake ore crusher and an assay furnace. Adjoining the Quantitative Laboratory is the weighing room, which contains two of Becker's best analytical balances, besides a number of less accurate instruments suitable for weighing large quantities of chemicals. The storeroom contains all the apparatus and chemicals. The room is in charge of an assistant, who gives out the supplies and keeps the books. This room contains the apparatus for preparing distilled water, and has also some space for laboratory work.

Physical Laboratory is a room
Physical 20 by 40 feet and is provided with
Laboratory. large tables suitable for use in performing experiments in General Physics and physical measurements. It has also two pillars built up from the ground and independent of the rest of the building for the accommodation of delicate instruments which would otherwise be disturbed by the vibrations of the floor. The store-room of physical apparatus is supplied with instruments suitable for illustrating the principles of Physics and for the use of students in practical work.

Separate laboratories are provided for Biological entomology and systematic zoölogy, Laboratory. systematic botany, and anatomy and histology. The laboratory for entomology and systematic zoölogy contains the private

collection of insects belonging to Professor McNeill and the collection of the University. Very complete apparatus is provided for collecting, drying, preserving, and mounting insects and other animals. The laboratory for systematic botany contains tables for the accommodation of about thirty students. All the apparatus necessary for the collection, mounting, and preservation of plants is supplied in abundance. The laboratory for anatomy and histology is well supplied with microscopes, microtomes and all the apparatus and chemicals necessary for hardening, sectioning, staining and mounting of material for histological work. It is supplied with incubators, sterilizers, and the other apparatus necessary for bacteriological and embryological work. It has also a very complete equipment for anthropometric work; an excellent dark-room, well furnished with the apparatus and material needed in photography and microphotography; models and charts for teaching animal and plant anatomy.

Geological Laboratory. The Geological Laboratory is provided with aneroid barometers, compasses, hand-levels, pedometers, etc., for field work, two petrographic

microscopes, and an excellent equipment of drawing apparatus for the construction of geological sections and topographic maps; also, with apparatus for the construction of relief maps.

There is a well-equipped laboratory for Determinative Mineralogy, and a room for the prepara-

tion of relief maps and other work connected with the department of geology.

The three boilers used to heat the buildings and run the shops furnish Mechanical Engineering ample facilities for testing the evapo-Laboratory. rative power of boilers, and the fuel consumption per pound of water Comparative tests of feed-pumps and evaporated. injectors are made. There is a complete set of calorimeters, thermometers, engine counters. engine indicators, measuring tanks, injectors, feed-water heaters, and all necessary apparatus for making engine and boiler tests. A Westinghouse, a Reynolds-Corliss, an ordinary slide-valve, a horizontal and a vertical engine furnish all necessary apparatus for practice in valve setting and examples of steam engines.

An 8 by 10 automatic slide-valve engine, now under construction in the shops, will soon be added to the equipment of the department.

A 60,000-pound Riehle testing machine is used to give the student practice in testing the strength of materials of construction.

The Electrical Laboratory affords

Electrical excellent facilities for experimental

Laboratory. work with practical dynamo-electric

machines. In the laboratory will be

found the leading types of machines for arc and
incandescent lighting, and for power; constant current and constant potential motors and generators,

representative of the different methods of power transmission; a Kelvin balance, standard cells, and a potentiometer for standardizing measuring instruments; Weston and other voltmeters and ammeters; electro-dynamometers; galvanometers of the tangent, reflecting, and Deprez-d'Arsonval types; magnetometers; standard resistance coils and bridges, and absorption dynamometers.

During the past year there have been added two Kelvin voltmeters, a D. C. A. C. polyphase motor-generator, with a large number of smaller pieces of apparatus.

The laboratory has been entirely remodeled, a substantial double floor relaid, and stone foundations provided for all machinery. Two brick piers were built for supporting delicate measuring instruments.

This apparatus enables the student to carry on experimental work of a very wide range, and to attain proficiency in operating and testing electrical machinery and instruments.

Students are also allowed to inspect the plant of the Fayetteville Electric Light and Power Company, and to take measurements and make tests on it. The Electrical Laboratory is connected with their primary mains, and is thus supplied with alternate currents of 2,000 volts potential for experimental work.

Civil Engineering Laboratory and Equipment.

The Civil Engineering Laboratory is provided with all necessary instruments for work in land, railroad and city surveying. The equipment of field instruments has been selected so as to afford students the opportunity

of becoming familiar with the instruments of different manufacturers. Among the usual field instruments there is a number of engineer's transits, theodolite, Y levels, transit with solar attachment, compasses, hand levels, standard and ordinary steel tapes, aneroid barometers, plane table, sextant, etc. During the last year there has also been added for astronomical work and triangulation, a large Altazimuth reading to seconds by levels and micrometers.

The equipment for the purpose of Cement testing the strength of mortars and Laboratory. cement, includes one 2,000-pound tensile testing machine, standard consistency apparatus. Vicats's and Gilmore's needles for determining set, metal molds for tension, compression and transverse test-pieces, steaming apparatus for blowing tests, and sieves for fineness.

Shop The machine shop contains a Westinghouse engine, which runs the machinery in the whole building, a large iron planer, a shaper, four lathes of different sizes and makes, drill press, two grinding machines, milling machine, 60,000-pound testing

machine, and a good supply of hand tools, benches, and materials.

The forge shop contains twelve Buffalo forges with down draft which takes the smoke away through underground pipes, thus avoiding the smoke and dirt of the ordinary blacksmith shop. It also contains a shearing and a punching machine, twelve anvils of different weights, and all the necessary blacksmith tools for the twelve forges.

The wood shop contains one buzz planer, one large cylinder planer, circular saw, band saw, double spindle shaper, mortising and boring machine, five smaller lathes, one 18-inch pattern maker's lathe, and eighteen benches, each equipped with a complete set of carpenter's tools.

The foundry contains one Colliau cupola with a capacity of one and one-half tons of iron per hour, one brass furnace of 150 pounds capacity, a Buffalo pressure blower, and a core oven.

The foundry is well equipped with moulder's tools, flasks, etc.

The boiler room contains two 75-horsepower boilers, one 40-horsepower boiler, feed pump, injectors, feed-water heater, measuring tanks, etc.

The various departments of the shop building afford facilities for giving practical instruction to sixty or seventy students at one time.

Among the facilities for instruction in engineering contained in the equipment of the University in addition to the shop equipment may be mentioned:

A Dean steam pump with air chamber, water

and steam cylinders, and valve chambers sectioned, so that a student may see the working parts.

A Cameron steam pump with the steam cylinder sectioned, showing the valve motion.

A Knowles pump in full working order.

A Blake steam pump in section.

Sections of injectors.

A model of a Stevenson's link motion.

A collection of samples of manufactured articles, such as steam pipe coverings, leather beltings, lubricating oils, etc.

Drawing tables and stools; and among the Room. special apparatus and instruments may be mentioned the planimeter, odontograph, slide rule, set of railroad curves, etc. A blue-print room has recently been fitted up with complete facilities for the details of the blue-print process. The room is also provided with photographic facilities which will be used to prepare lantern slides and prints illustrating various branches of engineering.

Art Room.

# Conditions of Admission.

Candidates for admission are urged to be present at the beginning of the session. Admission at a later date is not refused, but is attended with greater or less inconvenience.

Students on their arrival in Fayetteville should report promptly to the President. Needless delay in reporting or unseemly conduct may justify exclusion from the University.

Applicants should present certificates of honorable discharge from the school last attended, or furnish other testimonials of good moral character.

Examinations for admission to the Freshman class will be held in the following subjects:

- 1. English. The admission requirements in English are those of the American Association of Colleges, and most of the leading institutions in the United States. The examination is divided into two parts.
- (a) Reading and Practice. A few books are assigned for reading. The candidate is required to present evidence of a general knowledge of the subject-matter of these books, and to answer simple questions on the lives of their authors. The form of the examination will usually be the writing of a paragraph or two on each of the several topics set in the examination paper. The treatment of these

topics is designed to test the candidate's power of clear and accurate expression, and calls for only a general knowledge of the substance of the books. In place of a part or the whole of this test, the candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work done in connection with the reading of these books.

The books set for this part of the examination are:

1898-1899 Milton's Paradise Lost, Books I and II; Pope's Iliad, Books I and XXII; the Sir Roger de Coverly Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Southey's Life of Nelson; Carlyle's Essay on Burns; Lowell's Vision of Sir Launfal; Hawthorne's House of the Seven Gables.

1809-1900 — Goldsmith's Vicar of Wakefield; Lowell's Vision of Sir Launfal; Cooper's Last of the Mohicans; Coleridge's Ancient Mariner; Hawthorne's House of the Seven Gables; Dryden's Palamon and Arcite; Pope's Iliad, Books I, VI, XXII and XXIV; the Sir Roger de Coverly Papers in the Spectator; DeQuincey's Flight of a Tartar Tribe.

1900-1901—Goldsmith's Vicar of Wakefield; Cooper's Last of the Mohicans; Lowell's Vision of Sir Launfal; Dryden's Palamon and Arcite; Pope's Iliad, Books I, VI, XXII and XXIV; the Sir Roger de Coverly Papers in the Spectator; Scott's Ivanhoe; DeQuincey's Flight of a Tartar Tribe; Tennyson's Princess. (b) Study and Practice. Other books are assigned for more careful study. The examination upon these books covers subject-matter, form, and structure, and also tests the candidate's ability to express his knowledge with clearness and accuracy.

The books set for this part of the examination are:

1898-1899 Shakespeare's Macbeth"; Burke's Speech on Conciliation with America; DeQuincey's Flight of a Tartar Tribe; Tennyson's Princess.

1899-1900—Burke's Speech on Conciliation with America; Čarlyle's Essay on Burns; Shakespeare's Macbeth"; Milton's Paradise Lost, Books I and II.

1900-1901 Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison; Shakespeare's Macbeth"; Milton's Paradise Lost, Books I and II.

In order to pass this examination, a student must have a good practical knowledge of English Grammar as much as is contained in Maxwell's English Grammar), and of an elementary Rhetoric such as Raub's, Waddy's or Williams's; and no candidate will be accepted whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

- 2. Arithmetic. The examination will include the whole of some standard arithmetic.
  - 3. Algebra. To Simultaneous Quadratic

<sup>•</sup>Julius Cæsar will be accepted.

Equations, with special attention to factoring, the theory of exponents, and radicals. The examination will be taken from Wentworth's Higher Algebra.

- 4. Plane Geometry. The first four books of Phillips and Fisher's Geometry. In 1899 all of Plane Geometry will be required for admission to the Freshman class.
- 5. *History*. The examination will be taken from Chambers's History of the United States and Barnes's General History.
- 6. Geography. Any complete manual, such as Maury's or Frye's, will give the preparation, if thoroughly mastered. Special attention is given to the geography of the United States and of Arkansas.
- 7. Physiology. Martin's Human Body, briefer course.
- 8. Latin. Collar and Daniell's Beginner's Latin Book; the first twenty-five lessons in Bennett's Latin Composition; Cæser's Gallic War, four books, with questions on grammar and on the subject-matter, military equipment, etc. Lowe and Ewing's Cæsar is recommended. Latin is required for admission in Bachelor of Arts, Bachelor of Philosophy, and Normal courses; not in the other courses.

Students are advised to come prepared for all the studies in some one class, otherwise, their course is necessarily more or less irregular.

ORDER OF EXAMINATIONS FOR ADMISSION.

Wednesday, September 20. - 9 a. m., registra-

tion of students; 1 to 3 p. m., Geometry; 3 to 4 p. m., Physiology.

Thursday, September 21. 1 to 3 p. m., Arithmetic; 3 to 4 p. m., Geography.

Friday, September 22.—9 to 12 m., Algebra; I to 4 p. m., Latin.

Saturday, September 23.—9 to 11 a. m., English Grammar and Analysis; 11 to 12 m., English Composition, Reading; 1 to 2:30 p. m., U. S. History; 2:30 to 4 p. m., General History.

Students living at a distance from the Examinations University may obtain special local at other examinations if applied for in due Places than time before the beginning of each ses-Fayetteville, sion. The questions will be sent on application to the principal of any school or to any county examiner. The questions must be submitted by the principal or county examiner to the candidate under the usual restrictions of a written examination, and the questions and answers must be returned by the same officer to the University with his indorsement that the examination was properly conducted.

The graduates of accredited schools

Admission on are admitted to the Freshman class

Certificates. in the University without examination.

In all cases certificates from the principal of the school attended should be presented, containing specific statements of the kind and extent of work done in the studies in which credits are

desired. Blank forms for such certificates will be furnished by the University.

A student who presents a certificate of scholarship from a high school, academy, or college not on the list of accredited schools, is required to take such examinations as may be prescribed. The result of such examinations, together with the certificates, will be passed on and proper credit allowed by the professors of the departments which such student proposes to enter.

Candidates for admission to classes in Admission advance of the Freshman will be to Advanced required to pass satisfactory examinations in the subject previously pursued by the class which they propose to enter. But such candidates coming from colleges or universities of good standing may on the presentation of proper certificates as to the studies pursued be admitted provisionally to such standing and upon such terms as the Faculty may deem equitable in each case.

On application from the principal of Accredited any high school, academy, or other Schools. institution, an officer of the University will visit and examine the organization and work of such school. The points to be observed are the subjects included in the course of study, the extent of instruction in each subject, the text-books used, the length of the session, length of the recitation hours, methods of teaching, facilities

for instruction, and the discipline. Upon a favorable report, submitted in writing by the visiting officer, the school is declared by vote of the Faculty duly accredited to the Freshmen class of the University.

Any changes that may occur, especially in the principalship of the school, or m its course of study, should be reported to the President of the University, as the list of accredited schools is subject to yearly revision.

The University earnestly desires to cultivate triendly and harmonious relations with all other educational enterprises of the State, and to add to its list all schools that are doing the required work and that desire to assume the accredited relation.

## LIST OF ACCREDITED SCHOOLS:

Fort Smith High School, Principal, B. W. Torreyson.
Rogers Academy, Principal, Morrison Weimer.
Little Rock High School, Principal, R. C. Hall.
Marianna Institute, Principal, T. A. Futrall.
Lonoke High School, Principal, —— Hamlin.
Pine Bluff High School, Principal, J. H. Witherspoon.
Paris High School, Paris, Tex., Principal, J. G. Wooten.
Hinemon University School, Monticello, Ark., Principal,
J. E. Erwin.

Garnett High School, Garnett, Kan., Principal, F. McClellan.

Helena High School, Principal, W. W. Rivers.
Hot Springs High School, Principal, George B. Cook.
Amity High School, Principal, S. M. Samson.
Harrison High School, Principal, C. L. Scott.
Neosho Public School, Principal, J. M. Stephenson.
Paris Academy, Paris, Ark., Principals, G. S. Minmier and John D. Arbuckle.

Dardanelle High School, Principal, J. C. Bunch.

Russellville High School, Principal, J. C. Hamilton, Russellville, Ark.

Eureka Springs-High-School, Principal, C. S. Barnett, Eureka Springs, Ark.

Southwestern Academy, Magnolia, Ark., Principal, J. W. Cantwell.

Texarkana High School, Principal, Allen Winham.

Hope High School, Principal, R. A. Hearon.

Thompson's Classical Institute, Paragould, Ark., Principals, R. S. Thompson and G. R. Hopkins.

Jonesboro Training School, Principal, F. R. Alexander. Fordyce Training School, Principal, J. D. Clary, For-

dyce, Ark.

Camden High School, A. D. Carden, Principal, Camden, Ark.

Spears-Langford Military Academy, G. S. Storey and R. B. Willis, Principals, Searcy, Ark.

Van Buren High School, A. L. Peacher, Principal, Van Buren, Ark.

Students are allowed all reasonable freedom in choosing their courses of study. But they are required to pursue their studies in the order prescribed, and, when candidates for a

degree, to complete, as a condition of graduation, all the subjects in the course leading to such degree. Changes in the courses of study selected are discouraged, but for sufficient reasons are allowed if made within three weeks after admission; subsequently no such change can be made during the session except by the express permission of the Faculty.

Not less than twelve nor more than eighteen recitations or their equivalent per week, exclusive of military science and tactics, are allowed,

except by permission of the Faculty. Two hours of laboratory, shop or farm work, drawing or sight-reading, are counted equivalent to one recitation. If less than twelve recitations or their equivalent per week are specified in any course, studies must be elected to make up the deficiency.

The satisfactory completion of the Classification work of a class as attested by daily of Students, recitations and examinations is the condition of enrollment in a higher class. Some margin, however, is allowed for making up studies in arrears. But more than six hours per week required for such studies or more than six hours per week omitted from the studies of a given class prevents enrollment therein, except that in the engineering courses the number in both cases may be as many as eight. No student can be classified a Freshman in any course who has more than six hours per week of unfinished preparatory

Special all cases in which it is practicable Students. some one of the regular courses leading to a degree. The number of these courses with the liberal provision for electives allows sufficient play for individual preference in the

work.

selection of subjects required for a liberal and well-rounded education.

- 2. But students who are not candidates for a degree, but who have completed all the studies below the Freshman class, may elect a special course of study subject to the approval of the professor in charge of the major subject chosen.
- 3. Persons of mature age (not less than 21 years of age may elect a special course of study under the direction of the Faculty, provided they show by examination or otherwise that they are qualified to pursue profitably the studies which they propose to take up.
- 4. Students in special courses are subject to the same regulations and to the same examinations in the studies pursued as all other undergraduate students.
- Examinations, chiefly in writing,
  Examinations.

  The grades are determined by combining the values of the daily recitations and of the examinations, and are divided into five groups, as follows: "Excellent" (E), "Good" (G); "Fair" (F); "Poor" (P); "Bad" (B). A grade not lower than "Fair" is required for a "pass," which is the equivalent of about 75 per cent. At the end of each term a report is made to the parent or guardian of each student showing his progress, general conduct, etc.
- 2. If a student has failed in any study, he may nevertheless be allowed to take up the next

study in advance, provided he be deemed, by the professor in charge of the department to which such study belongs, not incompetent to pursue it; but he will be required to pass a satisfactory examination in the study in which he failed, or take it up with the next class.

3. If a student has proved competent to continue his advanced work, but has not completed all the preceding studies in his course, he must resume the latter, and if he be found to be overworked, he will be required to drop a part of his advanced work.

An act of the General Assembly of Appointment the State of Arkansas "To Regulate of Beneficiaries. dents in the Arkansas Industrial
University and to Amend Section
4088 of the Digest of the Statutes of 1804," approved April 19, 1895, reads as follows:

"Section 4088. It shall be the duty of the Board of Fristees to apportion the number of benericaries who shall be admitted as students in the University, without fution, among the several counties of the State, according to population, and to notify the county judge of each county of the number apportioned to the county at least two months prior to the beginning of each regular annual session of the school, and it shall be the duty of the county judge to appoint from the actual residents of the county, the number of beneniciaries

to which it may be entitled, a preference being given to those noted for diligence and proficiency in study; and the appointment so made shall be entered of record. If the judge of any county shall fail to appoint its quota of beneficiaries, or if those appointed shall fail to attend, the president of the University shall appoint such beneficiaries to the full number authorized by law from other counties having their full quota; *Provided*, such appointments shall be vacated on application of the county judge of a county so failing to fill its quota."

Number of beneficiaries fixed by the Board of Trustees is 1,000, dis-Beneficiaries, tributed to the counties of the State in proportion to the population.

There is also one "Honorary Scholarship" to each county, to be awarded for superior merit and proficiency, from the public schools of each county, according to section 2, of act of July 23, 1868.

All the beneficiary students should be present if practicable at the opening of the first term,

Appointments of beneficiaries are made for a period of four years; but failure to enter the University within a reasonable time, or absence from the University for a year or more forfeits the appointment. Withdrawal at any time during the session may be construed to forfeit an appointment. A student may be reappointed after an appointment has expired or been forfeited, but in such case the matriculation fee is paid again.

Qualifications. County judges, in appointing beneficiaries, are requested to note that applicants will be required to pass satisfactory examinations in the following

subjects as a condition of admission to the lowest preparatory class:

- 1. The Grammar School Arithmetic.
- 2. Maxwell's Elementary Grammar and Composition.
- 3. The whole of some Complete Manual of Geography.
  - 4. Proficiency in spelling, reading and writing.

It is highly important in making appointments to note earcfully these requirements; otherwise students coming to the University unprepared incurrectless expense and go away disappointed and often discouraged.

Forms of Appointment.

Students who have been appointed benenciaries must bring evidence of appointment in the following form, to be sent by the judge of the county court, in accordance with the sixth

section of an act approved March 6, 1875.

Send a notice like the following to the President of the University, and one to the Secretary of the Board of Trustees, at Fayetteville:

	[Form 2	-Notice to Presi	dent of Univers	sity.]
				Arkansas,
To the .		Unive	rsity:	
I	hereby not	ify you that I ha	ve this day appo	ointed
of		ity, State of Arl	kansas, a benel	ficiary of the
Arkans	as Industri	al University.		
G	iven under	my hand this	day of	189.

Counties.		Counties.	
Arkarsas	10	Lee	1 *
Ashlev	13	Lincoln	1.2
B x*ct.,	7	Little River	,
B * *	24	Logan	1.4
В е	15	Lor she	1.5
Bradley	8	Madisor	1.5
Calle to a control of	7	M.: 10h	112
Carre	16	Mil.er	: 2
Chico'	1.2	Mississippi	,
Cay	13	Monroe	1.2
Cark.	1.5	Montgomery	-
C	8	Nevada	17
Caracial	10	Newton	1
C 1.1	19	Oraclara .	1.5
C	16	Peny	1.
Craighead	S	Printps	25
Crawford		Pin	3
Cir. de		Pan	7
Ches	t	Problem 1	3
Dale		P ;	19
De		Prattie	10
Dies		P., 481	15
Le service	: 7	Randolph	1.2
Irok no	1.5	Sali	1.1
Fulton	`	S. "	1 /
Garland		Searcy	7
(11 11	\	Sebastian	
Office Carrier	٠,	S viet	`
Hempstead	2.4	Storp	1.2
H - Sping		S	_
Howard	1.2	St. Fr.c.ers	111
I le e de ce	2.1	( - 1 - 1	1'
170d	: 1	Var. B. ret	: .
Jackson	: 3	Washington	20
Jefferson	2 )	White	2 .
I have the same of	1 -	Woodhut	: 2
Lafayette	t.	Yell	. `
Lawrence	10		

	Beneficiary students pay no fuition	
Fees and	except in Music. (For terms in Art	
Expenses.	and Music, see Departments of Art	
	and Music.)	
Admission fee, per session, charged all benefi-		
ciary stud	ents\$ 5.00	
Tuition per year	r to non-beneficiary students 30.00	
Furniture for do	rmitory students, from\$ 6.00 to 15.00	
Board in dormit	ory at cost, per month, from\$ 8.00 to 9.50	
Board in private	families, per month, from\$10.00 to 15.00	

Uniform, including cap, purchased by male stu-

The necessary expenses of a student who wishes to live cheaply are:

Board in dormitory,	9 months, abou	t\$ 80.0	0
Washing, 9 months,	about	9.0	О
Furniture, first year	only	\$6.00 to 15.0	О
Admission fee		5.0	O

Admission fees are payable in advance; tuition fees payable one-half at the beginning of each term. Board bills are payable monthly in advance.

A diploma fee of \$5.00 is charged all graduates. All dues are to be paid or satisfactorily adjusted before diplomas are conferred.

Rooms in the University dormitories
Board for are free, but occupants provide then
Young Men. furniture, fuel, and lights. Students
leaving the University frequently sell
their furniture at a small reduction. If there are

not rooms enough for all, preference is given to Arkansas students. An officer of the University is in charge of the building, and the rooms are inspected by the Faculty whenever deemed necessary.

Students boarding elsewhere are under the supervison of the President of the University, and are allowed to board only at places approved by him. No student is allowed to change his boarding place without the consent of the President.

Board for Young Ladies. Sufficient funds have not yet been secured to provide a dormitory for young ladies, but all necessary assistance is rendered them in finding homes in private families in the town.

Parents, therefore, who send a daughter to the University, should place her under the control of the family with whom she boards, subject to the general supervision of the President of the University.

Absences and With-drawals.

Absences from the University during the session are not permitted except for valid reasons. The right of a parent to withdraw his son at any time, without reason assigned, is rec-

ognized; but without so withdrawing him, he cannot relieve him of the obligation to attend to his duties at the University. The incidental absences of students during the session are exceedingly disadvantageous, both to themselves and to the University. While, therefore, the Faculty permit them, in cases where propriety or urgent necessity

seems to make them unavoidable, they hold it to be a duty to inquire into the reasons for which the permission is solicited.

Parents or guardians who wish to withdraw their children or wards from the University should write to the President stating their wishes. No honorable discharge will be given to a student under age who is unable to produce the written application of his parent or guardian for his withdrawal, nor will an honorable discharge be given to a student under censure of any kind, whether for neglect of duty or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

By an act of the General Assembly of Sale of Arthe State of Arkansas, approved dent Spirits March 6, 1875, it is unlawful for any person to sell or give away any ymous or ardent spirits within 3 miles of the

Arkansas Industrial University, unless it be prescribed by a regular practicing physician for medicinal purposes.

## University Organizations.

Material changes have recently been Literary made in the organization of the liter-Societies. any societies, and their meetings, which are held weekly, afford enlarged opportunities for improvement in declamation, composition, debate, etc. Renewed interest in this valuable means of culture is shown by a number of students.

Dr. A. S. Gregg, of the class of 1878,
Prizes in the and Professor G. W. Droke, of the
Mathetian class of 1880, both members of the
Society. Mathetian So lety, have generously
offered prizes to be competed for by
the members of that society; the former for the
best oration, including both composition and de-

best oration, including both composition and delivery, the latter for the best declamation. These prizes are awarded during the commencement exercises.

Profs. W. A. Crawford and G. A.

Prizes in the Cole have each offered handsome
Garland prizes to be competed for by the
Society. members of the Garland Society, the
former for excellence in declamation, the latter for the greatest improvement in

debate.

The Arkansas University Geological and Biological Survey.

For the promotion of interest in the natural sciences and a systematic investigation of the many interesting questions of natural history within and adjoining the State, it is proposed to organize the Arkansas University Geological and Biological Survey. A party will be organized for field work during the summer vacation under the

direction of the professors in charge of Geology and Biology. Any student whose attainments are such as to permit him to take the work to advantage may be admitted to the party. In each case credit will be given in the University course according to the time spent and the character of the work done. Science teachers and others interested in science throughout the State are cordially invited to avail themselves of this opportunity of doing a pleasant and profitable summer's work.

University Magazine. The "Ozark" is a monthly periodical published by a stock company and edited by a committee of students. It is sent free, to all the accredited

schools and to such other schools in the State as may desire it.

Religious Exercises. Religious exercises are held regularly in the University Chapel at the beginning of each daily session. Students are required to attend.

The churches of Fayetteville cordially welcome the students to their Sunday schools and various

meetings for prayer and religious instruction. The denominations represented in the city are Baptist, Presbyterian, Cumberland Presbyterian, Methodist Episcopal, Methodist Episcopal South, Protestant Episcopal, Christian, and Roman Catholic. Many of the students are actively engaged in the work of the different church societies and guilds. The Young Men's Christian Association has commodious quarters in Buchanan Hall, and a commendable interest is shown. A Bible class has held meetings Sunday afternoon, and has been well attended.

Athletic Association, physical man.

The purpose of this organization is to encourage the development of the Association, physical man.

The Association as originally formed consisted of the U. of A. Athletic Club, the U. of A. Tennis Club, the U. of A. Baseball Club, and the U. of A. Football Club; and it is further provided that if any other club, organized by the students of the University for the practice of any sport, game, or exercise not already represented by one of the members of the Association, shall make a written application for membership in the Association, and the said application shall be approved by the governing body of the Association, the petitioning club shall become a member of the Association with all the rights and privileges pertaining to such membership.

Military The head of this department is an officer of the United States Army de-Department, tailed by the War Department for duty at the University.

All male collegiate students are required to take the Theoretical Course, and all male students over 15 years of age, not physically disable I, are required to take the Practical Course in Military Science, the latter including infantry drill, target practice, camping, guard duty, and various other exercises, the course overing the entire period of the student's stay at the University.

The act of Congress donating public lands for educational purposes requires that institutions which are the beneficiaries of such donations include Military Science and Tactics in their courses of instruction.

The system of practical instruction closely follows that used in the United States Army. It contains a course of gymnastic exercises for the development and improvement of the arms, chest, legs, hands, and feet. Besides being excellent physical training, this instruction has many advantages mentally. The necessity of being alert, listening for each word of command, and acting promptly on it, quickens the wit and cultivates the habit of fixing the attention and concentrating the thoughts. In addition to all this, it inculcates in the student a respect for authority and discipline which is equaled by no other system.

The cadets are organized into two battalions, composed of field staff, band, and five companies. The officers and non-commissioned officers are selected from those students who are most proficient in their drill and military studies, and most exemplary in their deportment, the majors, captains, and lieutenants being taken, usually, from the Senior and Junior classes, and sergeants and corporals from the Sophomore and Freshman classes. An office in one of the battalions is one of merit and distinction, and any unbecoming conduct subjects the appointed to reduction to the ranks.

The cadet band, of some twenty pieces, constitutes an interesting feature of the military organization. It receives the best instruction obtainable, practices three hours per week, and takes part in all military ceremonies.

A competitive drill is held annually at the close of the school year, when prizes are awarded for proficiency in this department. The result of the last competition, held in June, 1898, was as follows:

#### COMPETITION AMONG THE COMPANIES.

To Company "F," Captain A. V. Smith commanding, was awarded the National Color for the following year.

## CAPTAINS' COMPETITION.

To Captain A. V. Smith was awarded the Sword.

#### INDIVIDUAL COMPETITION.

To Sergeant B. L. Moore was awarded the Gold Medal.

Army Appointments. The three students of the Senior class having the highest grade of merit in this department are reported to the Secretary of War, and their names are recorded in the Adjutant-

General's office and published in the Army Register for that year. The President of the United States, in appointing officers from civil life, gives preference to those whose names are so recorded. The three graduates of the class of 1808 having the highest military merit were: Cadet Major George Nicholls, Cadet Major M. L. Bell, Cadet Captain A. V. Smith. Cadet officers, on graduation, are brevetted in the State Guard with the rank held by them in the Cadet Battalions at the date of their graduation, and recommendations of the Commandant of Cadets as to special military qualifications of graduates of the military course are filed in the office of the Adjutant-General of the State and considered in appointing commissioned officers of the State Guard.

A neat uniform of gray cloth, with brass buttons and black trimmings, is required to be worn by all cadets at drill. The uniform, complete, costs about \$15, and with ordinary care will last an entire year.

## ORGANIZATION OF THE CORPS OF CADETS FOR THE YEAR IN 15-19.

# Cadet Captain W. A. Ross, Acting Commandant of Cadets.

#### COMMISSIONED AND NON-COMMISSIONED STAFF.

COMMISSIONED WAD NOW-COMMISSIONED STAFF.	
Cadet First Lieutenant and AdjutantD. W. Tayl Cadet First Lieutenant and Quartermaster. C. F. Sando Cadet Sergeant Major	an. ne.
BAND.	
Callet First Lieutenant, Commanding the Band, I. F. Stew.	ant.
Cadet First Lieutenant, Leader of the BandH. W. Gai	
Cadet Second Lieutenant of the BandL. F. Owe	
Cadet Principal MusicianA. W. Beve	
Cadet Principal Musician	
Cadet Drum Major E. D. Kidd	
Cadet Sergeant of the BandJ. L. Du	
FIRST BATTALION.	
Calet Major, Commanding the Battalion, R. W. Hu	ie
Cadet First Lieutenant, Acting AdjutantH. A. Patters	
COMPANY "F" (COLOR COMPANY).	
Cadet CaptainF. B. Kir	by.
Cadet First LieutenantJ. C. Wilm	ot.
Cadet Second LieutenantSidney Conne	lly.
Cadet First Sergeant	er.
Cadet Sergeant	
Cadet SergeantV. H. Cochra	
Cadet SergeantF. I. Brow	
Cadet Sergeant	
Cadet Corporal	
Cadet Corporal C. H. Tripl	
Cadet CorporalG. D. Henders	211.

<sup>\*</sup> Withdrawn.

<sup>‡</sup> Appointed February 21, 1899.

## COMPANY "C."

Cadet Cadet Cadet Cadet Cadet Cadet Cadet	Captain C. R. Fillmore, First Lieutenant
Cadet	Corporal
	CorporalW. H. Hudgins.
Cadet	Corporal
Cadet	CorporalJ. H. Hawthorne.
	COMPANY "A."
	CaptainE. T. Brown.
Cadet	First Lieutenant
Cadet	Second LieutenantG. C. Abernathy.
Cadet	First Sergeant
Cadet	Sergeant
Cadet	Sergeant
Cadet	Sergeant W. E. Taylor.
Cadet	Sergeant
Cadet	CorporalF. E. Elliot.
Cadet	CorporalE. C. Knott.
Cadet	CorporalR. B. Barton.
Cadet	CorporalG. V. Prall.
	SECOND BATTALION,
Cadet	Major, Commanding the Battalion §J. H. Snapp.
Cadet	Major, Commanding the Battalion
	COMPANY "E,"
	CaptainJ. L. Hornor.
Cadet	First Lieutenant §W. V. Boatwright.
Cadet	First Lieutenant‡R. L. Saxon,

<sup>§</sup> Honorably discharged. ‡ Appointed February 21, 1899.

Cadet	Second Lieutenant§E. G. Martin.
	Second Lieutenant
	First Sergeant E. R. Berry.
	SergeantCalvin Sellers.
	SergeantJ. M. Clayton.
	Sergeant
	SergeantCarleton McRea.
	CorporalJ. E. Johnston.
	Corporal
	Corporal
	CorporalB. L. Herring.
	COMPANY "B."
Cadet	CaptainW. H. Rattenbury.
	First LieutenantFrank Horsfall.
Cadet	Second Lieutenant C. H. Orto.
	First Sergeant
	Sergeant II. II. Hamilton.
	Sergeant A. W. Wasson.
	SergeantL. L. Newman.
	SergeantCarl Smith.
	Corporal
	Corporal
	CorporalNorman Wilkinson.
	CorporalJ. W. Baxter.

The Agricultural Experiment Station.

The National Government established the Experiment Station as a department of the University in 1887, and maintains it to investigate agricultural problems for the aid of the farmers of the State.

The work of the Experiment Station is divided into the special lines of Agriculture, Horticulture, Chemistry, and animal and plant diseases. Spec-

<sup>§</sup> Honorably discharged.

<sup>1</sup> Appointed February 21, 1890.

ialists are employed in each line, and experiments are made both in the field and laboratory in the improvement of soils, the rotation of crops, diseases of plants and domestic animals, in fertilizers, the value of stock foods, dairying, and other matters. Students interested in agricultural subjects are given opportunity to observe the experiments and to acquaint themselves with the work of the Station in its various departments; the bulletins are also available for their use. The experiments and their results are published in bulletins, which are sent free to farmers, stock raisers, and fruit growers of the State, and to others interested in agriculture.

Those who desire the Station bulletins should apply for them to the Director of the Station, Fayetteville, Ark. One application is sufficient to obtain all future bulletins, if desired.

## DEGREES.

The following degrees are conferred by the University:

For undergraduate work:

Bachelor of Arts (B. A.).
Bachelor of Philosophy (B. Ph.).
Bachelor of Science (B. S.).
Bachelor of Civil Engineering (B. C. E.).
Bachelor of Mechanical Engineering (B. M. E.).
Bachelor of Electrical Engineering (B. E. E.).
Bachelor of Scientific Agriculture (B. S. A.).

## For graduate work:

Master of Arts (M. A.). Master of Science (M. S.). Mechanical Engineer (M. E.). Civil Engineer (C. E.). Electrical Engineer (E. E.).

The number of hours required for graduation in all courses leading to the degrees of B. A., B. Ph., and B. S. is sixty-four, exclusive of military science and tactics.

The courses leading to these degrees have been planned with the view of retaining as required studies those subjects which seem essential for all who are candidates for a liberal degree, and, at the same time, of allowing as large freedom of selection as is consistent with the attainment of a sound education.

## SCHEDULE OF STUDIES FOR THE DEGREES;

B. A.	В. Рн.	B. S.
FRESHMAN YEAR.	FRESHMAN YEAR.	FRESHMAN YEAR.
Hours per week English 1	Hours   per week	Hours per week English 1
SOPHOMORE YEAR.	SOPHOMORE YEAR.	SOPHOMORE YEAR.
English 2	English 2	English 2

## SCHEDULE OF STUDIES FOR THE DEGREES Continued.

in Music, 10S; in Art, 111.

B. A.	В. Рн.	B. S.
JUNIOR YEAR.	JUNIOR YEAR.	JUNIOR YEAR.
Hours per week	Hours per week  I mile had a serve per week  German 2 of 3 of 1 of 3 of 3	Hours per week Finglish 1
SENIOR YEAR.	SENIOR YEAR.	SENIOR YEAR.
English 6	English 6	English 6
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Note a Torona conclusion agreeman, require Sports, and Agreeman, i.e. a Harrendaric, require Normal Department

- Requirements for the institution in which the courses pursued have been in all respects equivalent.

  I. A prior Bachelor's Degree of the University of Arkansas, or of another institution in which the courses pursued have been in all respects equivalent.
- 2. Graduate study during a residence of at least one year in any three departments, in which the candidate has completed three courses in the major subject and two courses in each of the minor subjects; provided, graduates of this institution may do not more than half of their work in absentia, under the direction of the heads of the departments, but in all cases the candidate must be in residence during the term previous to his examination.
- 3. Acceptable work equivalent to eight hours (including a reasonable allowance for thesis) in major, and four hours in each of the minors.
- 4. A satisfactory thesis in the major subject, the theme of which must be approved by the head of the department six months before the examination.
- 5. The candidate must hand to the Professor under whom he has his major subject, the thesis on or before the first of May. No candidate shall appear for final examination until the thesis has been approved.

Requirements for the Degrees of C. E., M. E., or E. E.

These courses of study are intended to give additional preparation to those students who have finished an undergraduate course in Engineering, for some special line of work to which their previous study has led. The student will have all reasonable liberty in selecting such specialties and will

be limited only by certain general requirements. He will be required at the beginning of the year to make up the course which he proposes to follow and to present it to the Faculty, approved by the instructors concerned. If accepted, it will be subject to change only by the Faculty. In general, it is expected that these courses shall comprise one principal subject based on the course already pursued and two secondary subjects, one or both of which should be closely related to the principal. The graduate course should amount to not less than fifteen recitation hours per week as counted in undergraduate work.

The subject of a thesis for any of the above degrees must be submitted to the Faculty for approval before the middle of the second term.

These degrees will also be given to graduates in Civil, Mechanical, and Electrical Engineering who have been in successful practice of their profession for three years and who have submitted a satisfactory thesis on a subject approved by the Faculty.

Charges.—Graduate students pay \$10 for matriculation and registration, \$10 tuition (non-residents \$5) at the beginning of each session, and \$10 in advance for the final examination. Students who fail to comply with any of these requirements, or who do not each year complete the equivalent of two terms' work in one subject, will be dropped from the rolls. Should such students desire to resume their studies, they must pay for matriculation and registration, as if beginning for the first time. The diploma fee is \$5 in advance in each case.

Graduates attending only undergraduate classes pay the same fee as undergraduates.

Non-resident students have such assistance and instruction in their studies as can be conveniently given by correspondence.

Honors. Students who have attained grade "E" in work aggregating fifty hours per week (counted on the basis of a four years' course) are granted degrees "with special distinction."

Students who have attained grade "E" in work aggregating thirty-two hours per week, or grade "E" or "G" in work aggregating fifty hours per week, are granted degrees "with distinction."

## Description of Courses.

## ANCIENT LANGUAGES.

J. C. FUTRALL, Professor. E. F. SHANNON, Associate Professor.

In this department the following courses are offered:

### LATIN.

1	Sallust, Creero and Vergii
	An accurate knowledge of the Latin forms is insisted upon exercises in prose composition taken from Bennett's Latin Composition.  Associate Professor Shannon.
	Required of Freshmen in the B. A. and B. Ptt. courses.
2	Cicero and Livy
	Systematic study of the grammar; exercises in prosection, position, based chiefly upon the authors read in class sight reading; Roman literature.
	Professor Futrall.
	Required of Sophomores in the B. A. and B. PH. courses.
2.	Horace, Lity and Lacitus
	Large amounts of each author read in class: parallel read ing assigned: study of the grammar continued; the metre of Horace; prose composition; Roman literature.  Associate Professor Shannon.
	Optional with Greek 3 for Juniors in the B. A. course.
4.	Sight Reading Cour2-1
	Professor Futrall.
	Elective for students who have completed course 2.

## 5. Readings will be taken from Plautus, Terence, Catullus, Horace and others, and the attention of the student will be directed rather to the literary side of the authors read than to grammatical and syntactical peculiarities. Professor Futrall. Elective for students who have completed course 3. Text-books: Bennett's and Gildersleeve's Grammars; Wilkin's Primer of Roman Literature; Cruttwell's Roman Literature. Any approved edition of the Latin authors may be used, except when certain editions are prescribed. Harper's and White's Lexicons are recommended. GREEK. Elementary Course.....4 1. White's Beginner's Greek Book, with selections for reading. A thorough mastery of the forms and constructions given in this book is required. Associate Professor Shannon. Required of Freshmen in the B. A. course. Xenophon and Lysias.... 5 This course is intended to familiarize the student with all the ordinary Attic forms and constructions; frequent exercises in oral and written translation of English into Greek, based upon the text read, are given, and some practice in sight reading; Goodwin's Grammar. Professor Futrall. Required of Sophomores in the B. A. course. Homer, Herodotus and Plato...........3 3. Systematic study of the grammar; prose composition; Greek literature; sight reading.

Associate Professor Shannon.

Optional with Latin 3 for Juniors in the B. A. course,

#### 

The course will be conducted on the same plan as Latin 5.

Professor Futrall.

Elective for students who have completed Course 3.

Text-books: Goodwin's Revised Greek Grammar; Goodwin's Greek moods and tenses; Collar and Daniell's Prose Composition, based on Xenophon's Anabasis; Higley's Exercises in Greek Composition. Any approved edition of the Greek authors may be used, except when certain editions are prescribed. Liddell and Scott's Lexicons are recommended.

### ENGLISH AND MODERN LANGUAGES.

ERNEST T. BYNUM, Professor. HADGIE DAVIES, Associate Professor. CLARA EARLE, Instructor.

#### ENGLISH.

## 1. English Language and Literature.....3

- a Meikleiohu's English Language; eight essays chiefly narrative and descriptive) criticised and corrected by the instructor and copied by the student; thorough drill in English metres. For reference: Baskerville and Sewell's Grammar. Loansbury's History of the English Language. Twice a week.
- (b) Meiklejohn's History of English Literature, with parallel readings from thirty-five leading authors, ranging from Mandeville to Ruskin, and reports on same in class. For reference: Pancoast's English Literature, Shaw and others. Once a week.

Miss Davies and Miss Earle.

Required of all Freshmen in the B. A., B. S., B. PH., and Engineering courses.

Required of all Sophomores in the Agricultural course.

64	University of Arkansas.
2.	Prose Style and American Literature 3
	(a) Study of Standard prose, with rhetorical analysis and criticism. For 1898-'99 the selections are from Irving Ruskin, Carlyle, Burke, Goldsmith, Swift, Addison Bacon; three essays. Text-books: Garnett's English Prose and other texts, with extensive critical notes and questions prepared by the instructor. For topical study: Genung's Rhetoric. For reference: Minto, Pancoast. Shaw, and others. Twice a week.  (b) Watkin's American Literature, with extensive parallel readings from leading American authors, and class reports. For reference: Hawthorne and Lemon, Manly Pancoast, Pattee. Once a week.  Miss Davies.
	Required of all Sophomores in B. A., B. Ph., and B. S. courses; elective for all others who have completed Eng. 1.
	[In 1899-1900 the prose selections for (a) will be from Hawthorne, Thackeray, Macaulay, DeQuincey, Scott Johnson, Steele, Milton. This part of Course 2 may be taken for two consecutive years.]
2	Victorian Literature

A critical study of representative writers and of their masterpieces, with parallel readings, reports in class, and essays. Text-books: Saintsbury's Literature of the Nineteenth Century, and topical studies from Morley, Stedman, Taine, Whipple, and others; critical editions of Hood, Tennyson, the Brownings, Ruskin, and of other prominent writers. The study of prose writers in this class is a continuation of the course in Nineteenth century prose given in English 2.

Miss Davies.

Junior and Senior elective in all courses,

[In 1899-1900, the Classic School of Poets. Course 3 a) may be taken for two consecutive years.]

American Literature .... 2 4.

Lives of the leading writers and critical study of their masterpieces, with parallel readings, reports in class, and essays. Text-books: Pattee's American Literature and topical studies from Manly, Pancoast, Stedman, Richardson, from the American Men of Letters Series, and from other works; critical editions of Irving, Bryant, Poe, Longfellow, Emerson, Lanier, and of other leading writers.

Miss Davies.

Junior and Senior elective in all courses.

[In 1899-1900 Poets of the Romantic Movement. Course 3 (b) may be taken for two consecutive years.]

## z. Middl Inglish and Larly Modern English . . 2

Literary history of period from Chaucer to Milton; reading of representative authors, with historical, philological, and literary criticism; three essays. Morris's Chaucer, Kitchen's Spenser. Cook's of Sprague's Milton. Sprague's plays of Shakespeare and the Arden edition, parallel readings from these authors. For reference: Bucknell, Coleridge, Dowden, Gervinus, Hazlitt, Hudson, Pollard, Saintsbury, Ulrici, and others.

Miss Earle.

Required of all Juniors in B. A., B. Pit., and B. S. courses; elective for others who have completed Eng. t and z.

## o. Anglo-Saxon and Middle English .......... 3

Readings from the Ang'o-Saxon Gospels and Chronicles: selections from Alfred, Aelfric, Cædmon, and later writers. Bright's Anglo-Saxon Grammar and Reader (130 pages translated); Morris's Specimens of Early English, Part I; Ten Brink's Old English Literature (selections). For reference: Cook's First Book in Old English, Cook's Sievers's Grammar of Old English, March's Anglo-Saxon Grammar (syntax), Skeat's Etymological Dictionary, Brook's Early English Literature.

Mice Danies

Elective for all students who have completed Eng. 1 and 2.

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Champraey's English Language, with parallel readings and lectures. For reference and topical study: Skeat's.

Principles of English Etymology, Sweet's Grammar

	(historical part), Earle, Emerson, Henry, Morris, Peile, and others.
	Professor Bynum. Required of all Seniors in B. A., B. Ph., and B. S. courses.
	GERMAN.
1.	Modern German, Elementary3
	Joynes-Meissner Grammar, with composition; Brandt's Reader; committing short poems to memory.  Professor Bynum.
	Required of all Freshmen in B. S. course; elective with French 1 for Sophomores in B. Pit, course; Junior elective in all other courses.
2.	Schiller and Recent Authors3
	Leander's Traumereien; Freytag's Die Journalisten; Freytag's Aus dem Staat Friedrichs des Grossen; Schiller's Maria Stuart and Die Jungfrau von Orleans; Bernhardt's Deutsche Litteraturgeschichte with topics from Scherer's German Literature; grammar and original composition. For reference: Whitney's Grammar, Jagemann's Syntax. Dictionaries: Fluegel, Thieme-Preussen, Classic, Heath, or Adler (Quarto).  Professor Bynum.
	Required of Sophomores in the B. S. course; either German 2 or French 2 required of Juniors in the B. Ph. course; elective for all others.
3.	Lessing and Goethe
	Lessing's Minna von Barnhelm; Goethe's Hermann und Dorethea and Iphigenie; topics from Scherer; Lewes's Life of Goethe, with parallel reading of Düntzer. For reference: Brandt's Grammar, Behaghel's Historical Grammar.
	Elective for all who have finished Course 1.
4.	German at Sight and Conversation2
	Reading and discussion of easy texts in the German Language.
	Professor Bynum. Elective for any one who has completed Course 1.

composition; lectures on the history of French literature.

Junior and Senior elective.

Professor Bynum.

4.	French at Sight and Conversation
	Reading and discussion of easy texts in the French language.
	Junior and Senior elective. Professor Bynum.
5.	Scientific French
	Herdler's Scientific French Reader and other selections from French scientists.
	Junior and Senior elective.  Note—2, 3, and 4 have different readings in 1899-1900, and each may be taken for two consecutive years.
	SPANISH.
Ι.	Modern Spanish, Elementary3
	Edgren's Spanish Grammar with composition; Worman's First Spanish Book; Matzke's Spanish Reader, containing extracts from the best modern authors; Caballero's La Familia de Alvareda.
	Junior and Senior elective, Ordinarily this class will not be formed for less than five students.
2.	The Spanish Classic Writers
	Selections from Don Quixote; Lope's La Discreta Enamorada; Calderon's La Vida es Sueño, and El Alcalde de Zalamea; Conant's Spanish Literature; grammar and original composition. For reference: Knapp's Grammar; Sismondi's Literature; Clarke's Spanish Literature; Valesquez's Quarto Dictionary.  Miss Earle.  Junior and Senior elective.
	TOATTAN

#### ITALIAN.

There is at present no class in Italian, but such a course will be offered if a sufficient number of students desire to take it.

## MATHEMATICS AND ASTRONOMY.

GEO. W. DROKE. Professor.
B. J. Dunn, Associate Professor.

In this department the following courses are offered:

#### MATHEMATICS.

	MATHEMATICS.
1.	Solid Geometry, Algebra3
	Books IV and V of Plane Geometry, reviewed. The class will devote the last three months of the session to Algebra, beginning with simultaneous quadratic equations.  Required of all Freshmen.
2.	Plane and Spherical Trigonomety2
	Required of Freshmen Engineers.  Optional for Freshmen in the B. A., B. Ptt., and B. S. courses.
3.	Algebra, Plane Trigonometry, Conic Sections.3
	The class will devote about three months to each of these subjects.
	Required of all Sophomores in the B. S., B. Pit, and B. A. courses.
4.	And the Geometry $3$
	Required of all Sophomore Engineers.
5.	Trigonometry, Algebra, Calculus2
	Required of all Sophomore Engineers.
$C_{i_0}$	Calculus3
	Required of Junior Engineers.
7.	
	and Determinants2
	Elective. Prerequisite: Course 3.

8.	Analytic Geometry of Three Dimensions, and Differential Equations
	Elective, Prerequisite: Courses 4 and 6.
	GRADUATE COURSES.
9.	Modern Pure Geometry, Modern Analytic Geometry3
10.	Advanced Integral Calculus, Modern Higher
II.	Projective Geometry, Theory of Functions 3
	Text-books: Wentworth's Higher Algebra, Phillips and Fisher's Geometry, Crockett's Trigonometry, Osborne's Calculus, C. Smith's Solid Geometry, Johnson's Differential Equations, Tanner & Allen's Analytic Geometry.
	ASTRONOMY.
12.	Descriptive Astronomy, Lectures and Recita-
	Young's Astronomy. First term. Prerequisite: Course III.
13.	Spherical Astronomy3
	Second term.
	HISTORY AND POLITICAL SCIENCE

### HISTORY AND POLITICAL SCIENCE.

JAMES W. FERTIG, Professor.

This department aims to meet the demand of all students for a general course in history, and also to provide a sufficient number of elective courses to enable all who wish to do so to take additional courses in history, constitutional law, and the theory, organization and conduct of governments. A broad general course may be obtained by taking courses 1 to 4 inclusive, which must be taken in the order given below. In the Bachelor of Arts course, course it is required in the Freshman class. It is strongly urged that all candidates for the B. S. and Ph. B. degrees take Greek and Roman history in their preparatory work, in which case they can take courses 2 and 3 in the Sophomore and Junior years, and be prepared to elect any course offered by the department in their Senior year. Those who wish to elect any of the courses, 7 to 10 inclusive, must bear carefully in mind that they must at least have completed course 2 before they reach the Senior year.

#### COURSES.

I. History of	f Greece	and Rome		2
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Required in the Freshman year of all students in the B.A. course. Students in B. S. and Ph. B. courses will take this course in the Sophomore year, unless they have taken Greek and Roman history in the preparatory school, in which case they will take course 2 instead.

## 2. History of the Middle Ages......3

This course may be taken in the Sophomore year by all students who enter with Greek and Roman history, and in the Junior or Senior year by all who have taken course 1.

## 3. History of Modern Europe.

This course may be elected in Junior or Senior year by all students who have taken course 2.

4.	American Political and Constitutional History2
	From the Revolution to the present, with a review of the colonial period. May be elected by all in the Junior or Senior year.
5.	American Civil Government and Constitutional Law
	May be taken with course 4, or separately.
6,	Outline Course in History of England I
	Prerequisite: Course 1.
7.	Outline Course in the History of ArtI
8.	Reformation and Religious Wars (first term). 2
	Prerequisites: Courses 1 and 2.
0.	French Revolution and Napoleonic Era (second
	term)2
	Prerequisites: Courses 1 and 2.
10.	Comparative Study of American and Luropean
	Governments (first term)2
II.	Constitutional History of England (second term)2
	Prerequisites: Courses 1, 2, and 3, or 6.

## ECONOMICS AND SOCIOLOGY.

S. J. McLean, Professor.

The courses offered in this department are designed to afford such instruction as will be advantageous to those who intend to enter public life, or those callings which will bring them closely in touch with the activities of citizenship. Course it is required before more advanced courses in this department are taken.

1.	Principles	of Economics	2
		prescribed readings, reports and deb	ates.
		Walker, Political Economy.  prerequisite to more advanced work in Economic	s.

# 2. Industrial History of America and Europe

The leading industrial facts of this period are considered, and a detailed study of some of the more important industries will be made. Lectures, reports and prescribed readings. Selected portions of Rand's Economic History will be studied.

- 3. Banking (first part of second term)......3

  The principles of Banking and the history of Banking Systems. Lectures, recitations, reports and readings. Text-book: Dunbar, Chapters in the Theory and History of Banking.
- A Money (latter part of second term)......3

  The principles of Money and the history of Monetary Systems are considered. Text-books: Walker and Jevons.
- 5. Tariff History and Problems (first term)...2

  Special attention will be devoted to the tariff history of the United States. Text-book: Taussig, Tariff History of the United States. This will be supplemented by lectures and use of government documents.
- O. liest open land medical in the Plate and Aristotle to the Present (second term)...2

  Text-book: Ingram's History of Political Economy; sup-

plementary readings and reports will also be required.

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7.	Taxation and Finance (first term)3
	Principles and history of taxation, management of public debts, and consideration of governmental activities. Textbook: Plehn, Introduction to Public Finance. Lectures and readings and use of government documents.
8.	Railway Transportation; Its History and Problems (second term)3
	The evolution of the railroad system, government control, the rate-making question, railroad commissions, etc. Text-book: Hadley, Railroad Transportation. Lectures, prescribed readings, and use of original material.
9.	Principles of Sociology (first term)2
	This course considers the elements and conditions of social growth and progress. Recitations and lectures. Text-book: Fairbank's Introduction to Sociology.
0.	Problems of Social Growth (second term)2
	This is an advanced course in which social problems, such as the relations of capital and labor, pauperism, crime, social amelioration, immigration, etc., are discussed. Lectures and reports. The student is expected to familiarize himself with official reports bearing on these questions.
	CHEMISTRY AND PHYSICS.
	A. E. Menke, Professor.
	A. E. MENKE, PIDIESSOF,

W. B. Bentley, Associate Professor.

Lectures and recitations twice a week; laboratory work one afternoon throughout the year. Text-book: Richter.

Professor Menke.

Required for Freshmen B. S., all Engineering Courses, and B. S. A.

2.	Chemical Philosophy
	Twice per week, second term. This course supplements the instruction in theoretical chemistry given in course. Text-book: Morgan's Physical Chemistry. Reference books: Ostwald's General Chemistry, and Meyer's Theoretical Chemistry.  **Associate Professor Bentley.**
₹.	Qualitative Analysis.
	(a) Recitations twice per week, first term. (b) Laboratory work two afternoons per week for engineering students, three afternoons for scientific students, throughou the year. The recitations are occupied with the discussion of problems depending on the principles of qualitative analysis. The object of these discussions is to enable the student to understand the methods of separation awell as to be able to follow them practically. In the laboratory a large number of substances, both simple and complex, are analyzed. Laboratory Manual: Hill! Lecture Notes on Qualitative Analysis.  Associate Professor Bentley.
1.	Cisami Chemisty,
	Recitations three times per week throughout the year with laboratory work, if desired. Bernthsen's Organic Chemistry.
	Associate Professor Bentley.
5.	Curationistic Analysis
	Laboratory work four afternoons per week. Practice in gravimetric and volumetric analysis. Manual: Thorp.  Associate Professor Bentley.
۲.	Quantitative Analysis
	Second course. Analysis of agricultural and food products. First term.

# tivity of electrolytes; practice with polariscope, refrac-Class meets at convenience of the instructor. Preparing and testing reagents, making cupels, etc., and assaving IO. Texicological ..... I Once a week throughout the year. A working knowledge of qualitative and quantitative analysis is a condition 11. Gas Analysis..... Practical work once a week throughout the year. This course is designed particularly for technical students. Professor Menke. Three times per week. First term. Professor Menke. One term, three times per week, for civil engineering students. Professor Menke.

14.	Electro-Chemistry
	Three times per week the first term. For Junior elec-
	trical engineering students.  Associate Professor Bentley.
	PHYSICS.
1.	General Physics3
	Recitations twice and laboratory work once per week throughout the year. Recitations and experimental lectures on mechanics, sound, heat, light, magnetism, and electricity.
	Required for Sophomore B. S., and Engineering students.  Professor Menke.
2.	Electricity and Magnetism3
	Recitations twice and laboratory work once per week throughout the year. Text-book: Silvanus Thomson's Electricity and Magnetism.
	Required for Sophomore E. E. students.  Professor Menke.
3.	Physical Measurements
	Measurements in mechanics, sound, heat, light, magnetism, and electricity. Manual: Sabine.
	Associate Professor Bentley.
	BIOLOGY.
	J. F. McNeill, Professor.
	BIOLOGY.
1.	Organic Evolution
	Lectures twice a week for the second term.
	BOTANY.
,	General Botany3
par s	Laboratory work six hours a week for the first term. Text-book: Atkinson's Elementary Botany.

3.	Systematic Botany
	One lecture a week for the first half of the second term, with four hours of laboratory work. Six hours a week laboratory work for the remainder of the term. Designed to give students a general knowledge of the classification of plants and a more particular acquaintance with the seed plants and ferns of Northwest Arkansas. Text-book: Gray's Manual of Botany.
	zoölogy.
4.	General Zoolog)
	One recitation and four hours laboratory work per week. A general course in animal morphology and systematic zoölogy. Text-book: Hertwig's Essentials of Zoölogy. Laboratory Guide: Kingsley's Comparative Zoölogy.
5.	Systematic Zoology
	Laboratory work four hours per week throughout the year. This course is intended to give students a general knowledge of the vertebrates, especially of mammals, birds, and reptiles of the Mississippi Valley. Laboratory Guide: Jordan's Manual of Vertebrates.
6.	Taxiderm;
	Laboratory work two hours per week throughout the year. This course is intended to enable students to prepare mammals, and bird skins for laboratory and museum specimens.
7.	Vert. brate Anatomy
	Recitations twice per week and dissection of typical vertebrates. Text-book: Weidersheim's Anatomy of Vertebrates.
8.	Animal Histology5
	Two recitations and six hours in the laboratory per week, first term. Open only to students who have taken course 4. Text-book: Schafer's Essentials of Histology. Offered only in even years.

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#### ENTOMOLOGY.

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V.
Recitations twice, and laboratory work four hours per
week. Designed to give a general knowledge of the
structure, habits, and classification of insects and a more
particular knowledge of the orders Orthoptera and Lepi-
doptera. Text-books: Comstock's Laboratory Guide;
French's Butterflies of the Eastern United States, and

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This course is a continuation of 10, and must follow it. The systematic work for each student will be restricted to one order or family of which he will be expected to make a special study. Special attention will be given to breeding and rearing of insects, and to working out the life histories of those species that are little known.

## GEOLOGY AND MINERALOGY.

## A. H. PURDUE, Professor.

In arranging the courses in Geology, an attempt has been made to meet the needs of those students who wish to become well grounded in the elements of both the scientific and the practical phases of the subject, and at the same time of those who wish only a brief general culture course. The courses meeting the latter need are numbers 1 and 2. While the other courses are offered specially for those making Geology a major, they can be taken with advantage by anyone who has had course 2.

1.	Physical Geography and Surface Geology 3
	(a) Recitations three hours a week during the first term,
	with special attention to atmospheric and oceanic phe-
	nomena. Authors: Davis, Ferrel, Tarr, and Waldo.
	(b) Recitations and lectures three times a week during
	the second term on the evicin of tenegraphic features

the second term on the origin of topographic features, with special attention to the development of streams and stream features, and to Glacial Geology. Scott's Introduction to Geology is used as a text, but extensive outside reading is required.

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- (a) Structural and Dynamic Geology. Recitations and lectures three times a week during the first term. Text: Scott's Introduction to Geology, with outside reading.
- (b) Continental Evolution. Twelve lectures, with collateral reading three hours a week during a part of the second term, on the Evolution of the North American Continent.
- (c) Economic Geology. Lectures, with collateral reading, three hours a week, following Course (b), on the Formation, Modes of Occurrence, Uses and Geographic Distribution of ore deposits.

## 

ξ	Crust	allogra	phy and	Mineral	1001	2
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- (a) Lectures and recitations two hours a week during the first six weeks on the elements of Geometrical Crystallography. Text: Williams's Elements of Crystallography.
- (b) Laboratory work (two hours) twice a week following course (a) and extending through the year. Determination of minerals before the blowpipe, and in the wet way. Text: Determinative Mineralogy, Brush.

## 

Students electing Geology as a major will be expected to spend sufficient time in the field for the careful investigation of local geological problems, and to present acceptable theses on the work done. It is advised that the field work be done in connection with the University Geological and Biological Survey (see page 46). Special courses will be arranged for those who wish to elect work in addition to what is required.

# The Mormal Course.

JUNIUS JORDAN, Professor.

Section 6974 of the Revised Statutes of the State is as follows: "The State Superintendent of Public Instruction shall have power to grant State certificates, which shall be valid for life, unless revoked, to any person in the State who shall pass a thorough examination in all those branches required for granting county certificates, and also in algebra and geometry, physics, rhetoric, mental philosophy, history, latin, the Constitution of the United States, and of the State of Arkansas, natural history, and the theory and art of teaching."

This course includes all the branches required for a State certificate in accordance with the law, and leads to the degree of Licentiate of Instruction (L. I.). After completing the Normal Course, students may take up in the Junior class the work of any course for which they may be prepared, and compete for the corresponding degree.

FRESHMAN YEAR.	per	ours week
English I		
Latin I		
Mathematics, Geometry, and Algebra		
Botany I		3
Pedagogics 1 and 2		5
SOPHOMORE YEAR.		
English 2		3
Mathematics I		3
General History		
Physics I		3
Pedagogics 3 and 4		5

## PEDAGOGY.

## PROFESSOR JORDAN.

The graduates of the University fill many of the best educational positions in the State. The demand for trained teachers is increasing, and the facilities heretofore afforded at this State school have been enlarged so as to meet the necessity. In addition to this, the incitement to higher protessional ideals, consequent upon the county normal system, has made it important that provision be made to improve the skill and power of those teachers who prefer to study Pedagogics within the conditions that confront us in our own State.

Besides the requirements of greater efficiency in teachers of the ungraded schools, there is a marked demand for increased power in the principals of our high schools, and greater skill in supervision in our special school districts. It is no credit to the State that such material is usually sought and found beyond our borders.

The Department of Pedagogy was organized by the Board of Trustees to provide the course of study and work that is necessary.

- 1. To increase skill and efficiency in organization, methods, management, and teaching in our rural, or ungraded schools.
- 2. To quality teachers for the higher grades embodied in the studies necessary for State license.
- To prepare teachers for professional skill in supervision, either as principals or superintendents.

- To give increased scope and development to our secondary schools.
- 5. To elevate and maintain a greater pride and professional standard within our own borders.

The full course of Pedagogics will embrace the following subjects, supplemented by collateral readings and lectures:

Methods and Management. Organization and Teaching.

Psychology as applied to Education.

Theory and Art in Primary Schools.

Paidology.

Practice Methods with Model Classes.

School Supervision.

School Architecture, Sanitation, and Hygiene.

History and Science of Education.

Comparative methods—European and American.

Ancient and Modern Systems Compared.

History of Educational Epochs and Reformers.

Effects on Modern Civilization, caused by the improved science and art of Pedagogy.

Ethics of the Schoolroom and of the Profession.

Ethics-Personal, Social, National.

Physiological-Psychology.

Lectures and Experimental Work in Neurology.

History of Education in the United States.

History of Education in Arkansas.

Comparative Systems in the States.

Arkansas School Laws.

School Laws of the Various States.

The Department of Pedagogy is correlated with the work necessary for the degree B. Ph., and on the completion of the Normal course, students may continue Junior work in this course,

3

2

#### DEPARTMENT OF PEDAGOGY.

### PROFESSOR JORDAN.

1. Elements of Psychology and Pedagogy.

Three times a week with lectures. Readings: Lives of Pestalozzi and Horace Mann.

2. Teaching and Organization.

Methods and Management twice a week. Readings: King's School Interests and Duties; History of Education in Arkansas.

3. Applied Psychology.

Lectures on Pedagogy; three times a week. System and Science of Methods. Practical work with model classes.

4. History of Pedagogy.

Educational Epochs and Reformers; twice a week. Ethics, as to personal and relative rights and duties. Ethics of the schoolroom, and Professional Ethics; once a week.

5. Hill's Psychology.

Psychological Foundations of Education, three times a week. Lectures on Neurology, with experiments and investigations in the department of Biology. Reading: Boone's History of Education in the United States.

History of Education.

Ancient and Modern Science of Education; twice a week. Studies in Education, Hinsdale. Arkansas School Law.

7 Teaching and Organization with Special Reference to Secondary Schools.

Barnett's School Supervision; three times a week. Architecture, Sanitation and Hygiene; once a week.

. Modern Educational Development.

European and American systems compared. Effects on modern civilization of the improved standards of Peda-

gogics. Comparative study of the school laws of the various states; three times a week.

On the completion of the full course in Pedagogics, students will be required to write a treatise on the Public School System of Arkansas. Defects of the school law and how remedied. Educational development in the State.

### PHILOSOPHY.

PROFESSOR JORDAN.

The course offered in this Department, consists of recitations, lectures, and free and full discussions by the members of the class. In connection with a careful examination of the views and opinions of leading thinkers, students are encouraged to study their own montal phenomena and to subject to the test of in hydrici consciousness the various theories which courses ader investigation. Due attention is given to the recognised contributions of modern Physiology to Psychology.

As introductory to this part of the subject, the Professional Biology, gives a confesciol lectures with accompanying laboratory work in Neurology, which all stillents whose course meludes Pedagogy and Psychology are required to attend during a part of the smooth term in Sophion of Pislagogies, and Junior work for the University degrees.

#### PSYCHOLOGY.

1. Study, investigation, and discussion of the various mental phenomena as involved in the intellectual processes of Knowing, Feeling, and Willing. An examination of

the various theories of consciousness, as set forth by European and American Philosophers. Text-books: Hill, Ladd's Outlines of Descriptive Psychology. Application of principles to Education. Three times a week.

## 2 Logic.

Text-book: Hyslop. Reference books: Mills, Bain, Hill's Jevons. Twice a week.

# 3. Elements of Ethics.

Comparative Ethics. The bearing on the moral standard of the theories of Evolution, Sociology, Biology, Economics, and Political Economy. Three times a week.

## 4. History of Philosophy.

An outline of the Ancient, Mediæval and Modern theories. The history of European morals from Charlemagne to the present time. The development of Ethics in the progress and economics of the national life of the United States. Three times a week.

## MECHANICAL ENGINEERING.

CHAS. E. HOUGHTON, Professor and Superintendent of Mechanic Arts.

MAGE MARTIN, Machine Shop, Forge Shop, Assistant Superintendent of Mechanic Arts.

B. N. WILSON, Wood Shop, Foundry.

Two courses are offered, a four years' course ading to the degree of B. M. L., and a short cause of two or three years, depending on the preparation of the student.

While the major part of a conse in mechanical engineering necessarily consists of selentine and technical studies, the four years course provides for instruction in English and the modern languages, and offers electives that may be taken in other than technical subjects.

Besides the mathematical and scientific studies which constitute the necessary preparation for the study of the engineering branches, instruction is given in mechanics, machine design, theory of steam and gas engines, etc. Special attention is given to the practical application of the truths and theories taught in the classroom, a large part of the time being devoted to shop work, drawing, and laboratory practice.

Sufficient instruction is given in the theory and use of electrical machinery to enable the student to use it intelligently.

In the second term of the Senior year the student is offered an elective in the branch of mechanical engineering in which he wishes to specialize.

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- (a) Woodworking. Principles of carpentry and joinery; exercises in wood turning.
- (b) Founding. Green sand moulding. Melting and pouring brass and iron.
- (c) Forging. Management of fire; drawing and welding; riveting and tempering; casehardening and annealing.
- (d) Patternmaking. Practice in making patterns; care and use of woodworking machinery.
- (e) Ironworking. Chipping, filing, turning, planing, drilling, grinding; erection of machinery.
- (f) Advanced work in any of the above courses.

# 2. Mechanical Drawing.

Geometrical drawing: copying machine drawings; working drawing from machine parts: tracing: blue printing. One year, four hours per week.

# 3. Machine Design......3

Kinematics of machinery; design of gear teeth, cams, link motions, etc. Two hours recitation per week; two hours drawing, first term. One hours recitation; four hours drawing per week, second term. Text-book: Machine Design, Smith.

## 

Statics and dynamics; strength of materials; hydraulics. Four recitations per week for one year. Text-book: Mechanics of Materials and Hydraulics, Merriman.

## 

An elementary course in the application of mechanics to the materials used in machine construction; the determination of stresses in machine parts. Text-book: Strength of Materials, Merriman. Three recitations per week for one year.

## 

Elementary thermodynamics; history of the steam engine; comparison of types of steam engines, boilers, pumps, etc., valve gears. Text-books: Steam Engine. Ewing; Valve Gears, Ilalsey. Three recitations per week, second term.

## 

Calibration of engineering instruments, indicators, steam gauges, planimeters, nozzles, weirs, etc.; tests of the materials of construction in tension, torsion, compression, and bending; complete engine and boiler trials; special investigations. Text-book: Experimental Engineering, Carpenter. Four hours per week for one and one-half years; begins the second term.

	Thermodynamics; theory and design of steam engines and boilers; theory of gas and oil engines; problems in engine and boiler design. Text-books: The Steam Engine, Ewing; The Gas and Oil Engine, Clerk. Three recitations and six hours drawing per week, first term.
8.	I considire Me house
	A study of locomotive boilers, cylinders, frames, etc.; valve setting; compound locomotives; air brakes, etc. Text-book: Catechism of the Locomotive, Forney. Two recitations per week, first term.
G,	Cotton Gins, Compresses and Oil Machinery . 2
	Lectures on the machinery now in use and discussion of improvements. Two hours per week, first term.
Ю.	$Retrigger(tim_{s}, Meltinger) = 1.$
	Comparison of the machinery used in the different systems; methods of ice making; cold storage. Two lectures per week, second term.
II.	Heaving and Vengine 2
	Principles of Ventilation; the different systems of heating, by steam, hot water, and air; specifications. Textbook: Heating and Ventilation, Carpenter. Two hours per week, second term.  [Courses 10 and 11 will not both be given in the same
	year; they may be taken together as one two-hour course.]
12.	Hydraulic Machinery2
	A study of the design, construction, and operation of water wheels and pumping machinery. Two recitations per week, second term.
13.	Stone $I(x_0, x_0, x_0)$ 4
	Mechanical engineering of power plants; selection of machinery for the equipment of power stations; plans and

specifications. One lecture, and six hours drawing per week, second term.

# 14. Machinery and Mill Work.....4

Discussions of the different methods of distributing power in full work; considerations controlling the design of the power plant; specifications. One hour lecture, and six hours drawing per week, second term.

#### 

Design and construction of locomotives; repairs for rolling stock; discussion of the problems relating to the mechanical engineering of railroads. One hour lecture, and six hours drawing per week, second term.

The department reserves the right to withdraw any course not elected by four or more students.

# COURSE IN MECHANICAL ENGINEERING FOR DEGREE OF B. M. E.

FRESHMAN YEAR.		p	er	ours week
Mathematics 1 and 2				5
1 · 2,1 · 1 · · · · · · · · · · · · · · · · ·				
Physics I				
Mechanical Drawing, M. E., 2				2
Shop Work, M. E., i d, c		0		3
Total				16
SOPHOMORE YEAR.				
Mathematics 4 and 5				
Com, sty :				3
* Descriptive Geometry, C. I. at † Electrical Measurements, E. E., 2				2
Physics				3
Shop Work, M. E., 1 c	0 4			3
1 (2.1)				1.65

<sup>\*</sup> First term,

<sup>†</sup> Second term.

#### JUNIOR YEAR.

Mathematics 6  * Dynamo Electrical Machinery, E. E., 6  * Steam Machinery, M. E., 5  * Electrical Laboratory, E. E., 5  - Experimental Engineering, M. E., 6  Hydraulics and Mechanics, M. E., 4  Machine Design, M. E., 3  Shop Work, M. E., 1b, and f	3 3 4 3 2
Total	17
* Steam and Gas Engines, M. E., 7	6
* Cotton Gins, Compresses, etc., M. E., 9 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2
* Hydraulic Machinery, M. F., 12.  Experimental Engineering, M. E., 6.	2
* Electrical Laboratory, E. E., 5 \  * Flectrical Railroads, F. F., 9	2
Modern Language Elective Thesis	3
Total	18

# MECHANIC ARTS COURSE.

This course is designed to meet the wants of two classes of students:

First. Those who are not able to spend the time required for the completion of the four years' course.

Second. Those who lack the necessary preparation for admission to collegiate classes, and contours to become candidates for a degree.

<sup>·</sup> First term.

<sup>†</sup> Second term

Special attention is given to instruction in shop work and drawing, sufficient time being given to the former to enable a student to become familiar with all its branches, and acquire proficiency in some chosen one. The time spent in the drawingroom will enable the student to make and understand machine drawing.

In the last year the technical instruction is designed to give such an elementary knowledge of mechanics, machine design, and steam machinery, as will enable the student to use and care for machinery intelligently. No diploma is awarded, but a certificate of proncincy will be given on the completion of the course.

Mathematics, second year (preparatory)	. 4
TECOND LEMM	
Mathematics 1 and 2 Physics 1 M. E., 2 Mechanical Drawing. M. E., 1 Shop Work	. 3
THIRD YEAR. First term.	Second term.
M. E., 3 Machine design 3	
M. E., 5 Steam Machinery	3 6
E. E., 1 Dynamo Management	2

## CIVIL ENGINEERING.

J. J. KNOCH, Professor.

The design of this department is to furnish a course of theoretical instruction, accompanied by illustrations and as much of engineering practice as can well be taught in schools. This course will give the student a knowledge of the fundamental principles required to enter intelligently upon the various branches of engineering belonging to this profession.

The special technical studies, which are offered in this course, may be grouped under the heads of Surveying, Applied Mechanics, Road and Railroad Engineering, Hydraulic Engineering, Bridge Engineering, and Sanitary Engineering.

Instruction.—The work in Surveying extends over three years. It embraces land surveying, leveling and United States public land surveys during the Sophomore year; topography, railroad reconnoissance and location during the Junior year, triangulation and geodesy during the Senior year, Much time is devoted to practice in the field and drafting room, this work being carried on parallel with the classroom work. Each year a party of engineering students go into camp one week for practice in surveying and locating railway lines.

2.	Surrente:
	First, and part of second, term. Care, use, and adjustment of instruments; use of chain, tape, compass, transit, solar attachment, level, sextant, and plane table; land surveying, leveling, contouring, laws and instructions relating to surveys of the public domain. Text-book: Raymond's.
3.	Field Practice2
	Exercises in land, city, and topographical surveying.
4.	$Hi_Sk\omega\eta s$
	One hour per week, second term. The location, construction, and maintenance of common, Macadam, and Teltord roads; brick, stone, wood, and asphalt pavements for city streets. Text-book: Spalding's Roads, Streets and Pavements.
5.	Raile ad Engineering
	Two hours per week throughout the year. Preliminary surveys and location; transition curves, yards and turnouts; estimates of earthwork and material used in construction; the economics of railway location and management. Text-books: Searle's Field Engineering, and Crandall's Transition Curve and Earthwork Computations, first term; Wellington's Economic Theory of Railway Location, second term.
6.	Tichi P/nettic
	Location of curves, turnouts, and Y's; measurement of embankments and cuts, and computation of volumes.
7	Railroad Survey.
	One week, twelve hours per day. Actual field practice in reconnoissance, preliminary survey, and location.
8.	Drawing2
	Lettering titles for maps and drawings. Pen and colored topography.

Two hours per week, second term. Study of systems of water supply; collection, purification, and distribution of water; location of waterworks, with details of estimate of cost. Text-book: Fanning's Hydraulic and Water Supply Engineering.

14.	Engineering Laborat	(or)	
	other properties of mater crushing tests of brick, sto	nd term. Test of strength and talk of construction: tensile and one, and cement; flow of water was, and measurement by means	
15.	Tield Practice		
	Two hours per week, first ical survey, triangulation,	and second terms. Topographand leveling.	
COL	JRSE IN CIVIL ENGI	NEERING FOR DEGREE	
	OF B. C. E.		
	FRESHMAN.	SOPHOMORE.	
Math Che Fug C. E	hematics 1	Mathematics 4, 5	

SENIOR.

C. E. 16..... 2

C. E. 13..... 2

C. E. 11, 1st term..... 2 Geology 5, 2nd term.....

C. E. 15, 1st term..... 2

C. E. 14, 2nd term ..... 2 C. E. q. 1st term.....

C. E. 10..... 4 and 3

M. E. 12, 2nd term..... Elective..... 3 Thesis.....

## ELECTRICAL ENGINEERING.

W. N. GLADSON, Professor.

Two courses of instruction are offered. four years' course is intended to afford a good gen-

JUNIOR.

M. E. 4..... 4

M. E. 6, 2nd term ... 1

Geology 2..... 1 ist term. 4

or Chemistry 13

Mathematics 6....

eral education, and at the same time to ground the student so thoroughly in the principles of Electrical Engineering as to furnish a good foundation for the profession.

Theoretical and applied electricity and the mechanics of engineering are naturally the leading subjects.

Theory is amply treated and tested by experiments in well equipped laboratories, thus affording the student a degree of facility in the use of instruments and machines, which is acquired only by continued practice. As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of special study. The subject of such study must lie within the field of Electrical Engineering. It must be announced not later than the beginning of the second term of the senior year, and be approved by the Professor in charge. The completed thesis must be submitted not later than two weeks before commencement day, and one copy must be deposited in the Library as the property of the University.

The short course, of two years, is designed for students lacking time and preparation for the full course, and is intended especially for those students who have had some practical experience in engineering. The work is more elementary than in the long course, embracing only the necessary mathematics, which with physics, electrical engineering and laboratory work, gives the student sufficient theory, supplemented by practice, in the shortest possible time.

This course prepares students for practical work, such as superintending or managing lighting, power, or manufacturing plants. It does not lead to a degree, but a suitable certificate will be given on completion of the work.

plet	ion of the work.
Ι.	Practical Management of Dynamos and Metors
	Recitations. Second term, two hours a week. A practical treatise on installing, starting, testing, locating, and remedying faults in dynamos and motors. Text-books Crocker & Wheeler's Practical Management of Dynamos and Motors.
2.	Electrical Measurements2
	Recitations and practice twice a week, first term. Text- book: Electrical Measurements by Carhart and Patter- son.
3.	Technical Drawing
	Lectures and practice two atternoons a week throughout the year. Working drawings of electrical apparatus; wiring plans designed by student.
4.	Technical Drawing3
	Lectures and practice six hours a week throughout the year; an extension of Course 3, and must be preceded by it. Drawings of circuit and machine, electrical calculations, and mechanical designs of electrical machinery; complete power plants designed by student.
5.	Electrical Laboratory2
	One afternoon a week throughout the year. An extended course in magnetic and electrical measurements; current electro-motive force, and resistance; use and calibration of instruments, softmeters, and potentionaries; explora

tion of magnetic fields; dynamo work begun.

6.	Electrical Laboratory4
	Two afternoons a week throughout the year. This is an extension of Course 5, and must be preceded by it. A full experimental course in operating and testing direct and
	alternate current machines; Photometry transmission, storage, and transformation of electric energy. Special courses given suited to the preparation and object of the student.
7.	Dynamo Electrical Machinery
	Recitations. Three hours a week throughout the year. Confined chiefly to direct current apparatus, including types of motors, generators, and transformers; design, calculations, construction, testing, and operating. Textbook: Thompson's Dynamo Electric Machinery.
8.	Theory of Alternate Currents2
	Recitations twice a week, first term. Text-book: Steinmetz.
9.	Polyphase Electric Currents2
	Recitations and lectures twice a week, second term. Text-book: Thompson.
10.	Electric Railways2
	Recitations and lectures twice a week, second term,
11.	Telephony and Telegraphy2
	Lectures and recitations twice a week throughout the year. Text-book: Preece's Telephone.
COL	URSE IN ELECTRICAL ENGINEERING FOR

# COURSE IN ELECTRICAL ENGINEERING FOR THE DEGREE OF B. E. E.

FRESHMAN.	Hours per week
Mathematics 1, 2	
English I	
Physics I	
M. E. 2 Mechanical Drawing	2
M. E. 1 c, d Shop Work	3

# UNIVERSITY OF ARKANSAS

# Electrical BRARKing.

101

SOPHOMORE.		ours week
Mathematics 4, 5		5
Physics 2		3
Chemistry I		3
C. E. I. Descriptive Geometry and \ E. E. 2 Licetrical Measurements		2
M. E. re Shop Work		3
junior.		, ,
, and the second		/
Mathematics 6		3
E. E. 7 Dynamo Electric Machinery E. E. 5 Electrical Laboratory		3 2
E. E. 3 Technical Drawing		2
W. F. 4 Machanics and Hadraulics		4
M. E. 5 Steam Machinery and \(\) Chemistry 11		3
Chevastry 14		
SENIOR.		
E. E. 8 Alternate Current Theory and \		2
E. E. 8 Alternate Current Theory and E. E. 9 Polyphase Electric Currents		_
E. E. 6 Electrical Laboratory E. E. 4 Technical Drawing		4
E. E. II Telephony and Telegraphy		2
M. I. o Mech.c ical Laboratory and E. E. to Electric Railways		,
E. E. 10 Electric Railways		-
German 1 or		3
Spanish 1		1
Elect e		2
SHORT COURSE IN ELECTRICAL ENGINEERIN	īG.	- (
FIRST YEAR.		
Mathematics 1, 2		,,,
Physics in the state of the sta		5
M. E. 2 Mechanical Drawing		2
M. E. 1c, d, e, Shop Work		3
Elective		3
SECOND YEAR.		
E. E. 6 Dynamo Electric Machinery		3
E. E. 5 Electrical Laboratory		2
E. E. 3 Technical Drawing		2
E. E. I Management of Dynamos and Motors, second		3
Physics 2		``
M. E. 4a Strength of Materials		3
Lactive		

## DEPARTMENT OF AGRICULTURE.

C. L. NEWMAN, Professor.

The degrees conferred upon the satisfactory completion of this course are Bachelor of Scientific Agriculture and Bachelor of Science. A two years' course is provided for students who cannot remain to complete the full course.

Agriculture is both a science and an art, and the course of instruction is so mapped out that the student may master both the principle and the practice of the industry that gives employment to three-fourths of the State's inhabitants. The student is encouraged to discover, plan, and execute for himself; and his daily association with specialists keeps him abreast with the many sciences which compose the conglomerate science of agriculture.

Manual labor is required of students only for purposes of instruction and illustration. While each student is expected to be proficient in the use of both farm tools and machinery, it is not proposed to make a farm laborer of him, but a director of farm labor.

## 1. Introduction.

Definition of scope of subject; relation to science, history, etc.

## (a) Soils.

Origin, classification, properties, relation to climate and crops: drainage; irrigation: hygiene and general management of soils; special management for special purposes.

# (b) Farm Crops.

Farm manures and germ manuring; preparation and culture; food-plants, forage and hay plants, root crops, pastures; textile, oil and sugar plants; harvesting.

## 2. (a) Farm Buildings, Machinery and Tools.

Construction and management of stables, barns, dairies, silos, pigeries, sheepfolds, poultry houses; farm fences and roads. Management and utility of farm machinery and tools.

# (b) Zootechny.

Breeds and breeding of horses, cattle, sheep, swine, goats, poultry, etc., and their specific and general management; aviculture; pisciculture; insecticides.

## 3. Rural Economy.

Farm rules and management; hired labor; farm accounts; markets and marketing; meteorology.

## AGRICULTURE, B. S.

FRESHMAN.	SOPHOMORE.
Mathematics 1 3	Mathematics 3 3
German 1 3	German 2 3
English 1	English 2 3
Chemistry 1 3	Physics 1 3
Botany 2 and 3 3	History or Economics 2
	Agriculture 1 3
JUNIOR.	SENIOR.
v	
JUNIOR.  History or Economics 3 English 4	English 6
History or Economics 3	English 6 1
History or Economics 3 English 4	English 6
History or Economics 3 English 4	English 6

# AGRICULTURE, B. S. A.

22021200220	112, 2. 0. 11.
FRESHMAN:	SOPHOMORE.
Mathematics 1	Mathematics 3       3         English 2       3         Physics 1       3         History or Economics       2         Horticulture 1       3         Agriculture 1       3         SENIOR       1         Philosophy       3         Horticulture 2       3         General 1 latorsology       3         Agriculture 3       2
Agriculture 2 2. Elective 3	Elective
John T. Stins	HORTICULTURE.
1 (a) Orcharding and	Small Fruits3
First term. A study of State, their culture, marke	the fruits best adapted to the eting, etc.
(b) Propogation of 1	Plants.
First half of second term. ding, grafting, and genera	General nursery work—budal care of nursery stock.
(c) Vegetable Garde	ning.
tables adapted to the State	A study of the leading vege- e, forcing vegetables and general work in growing vegetables for
2. (a) Physiology of Pa	lants3
	aken up from a horticultural

# (b) Plant Breeding.

Second term. Crossing of plants, originating new varieties, plant variation, etc.

# (c) Spraying Plants.

For fungus diseases and injurious insects. Twelve exercises.

# 3. (a) Experiment Work With Fruits.....2

And a study of the evolution of fruits and vegetables. First term.

# (b) Forestry.

Second term. A study of the forestry of the State from an economic standpoint. Landscape work.

#### HORTICULTURE.

FIRST YEAR.	SECOND YEAR.
Algebra, 2nd year	Algebra 1       2         Geometry 2       3         General Chemistry 1       3         English 1       3         Botany 1       3         Shop Wies, Wood Work       2
THIRD YEAR.	FOURTH YEAR.
French, German or Latin       3         Physics 1‡	French, German, or Latin. 3         Economics 1

<sup>\*</sup> First half year.

<sup>§</sup> Second half year.

<sup>‡</sup> By special arrangement students may take biology.

# AGRICULTURAL CHEMISTRY AND METEOROLOGY.

G. L.	TELLER	(Experim	nent Station)	).
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	G. L. Teller (Experiment Station).
Ι.	A study of the chemistry of soils; the chemical composition of manures and fertilizers and their relation to different soils and the crops grown thereon; the composition of different animal foods and effects of the different constituents of food upon the maintenance, growth, and development of animals and upon their products; the nature and composition of milk, butter, cheese, and other products of the farm; the chemistry of fermentation in its relation to the manufacture of bread, cider wine, vinegar, etc.
2.	A study of winds, storms, rainfall, and changes of tem perature in soils and air; weather forecasts; relation o weather and climate to plant growth and preservation Opportunities will be given for the students to becomfamiliar with the instruments used in making and recording weather observations.
	HYGIENE AND BACTERIOLOGY.
	R. R. Dinwiddle (Experiment Station).
1.	Hygiene
2.	Bacteriology.
	FIRST TERM—A study of the bacteria in their relation to Agriculture and Horticulture. Laboratory work four hours a week.

## MILITARY SCIENCE AND TACTICS.

Codet Contain W A Page

	Cadet Captain W. A. Ross.
1.	Practical Work
	Three hours per week. In school of the soldier, squad, platoon, company, and battalion, close and extended order; ceremonies of grand mounting, dress parade, inspection and review; camping, guard duty, target practice, laying out field works, and signaling. In this work, the cadet officers act as instructors, thus putting into practice the knowledge gained in previous years.
2.	Recitations and Lectures
	One hour per week. Infantry Drill Regulation (U. S. Army, Part I). Manual Guard Duty (U. S Army).
₹.	Recitations and Lectures
	One hour per week. Infantry Drill Regulation (U. S. Army, Part II). Small Arms Firing Regulations (Blunt).
4.	Restations and hotely a continuous of
	One hour per week. Military Field Engineering (Beach) Military Signaling (United States Army Signal Code).
5 -	Recitations and Lectures
	One hour per week. Service of Security and Information (Wagner). Military Law (Winthrop).

## ELOCUTION.

JESSIE L. CRAVENS, Instructor.

The course of instruction comprises a thorough training in the essentials of expression.

1. Physical Training.

The course includes thorough drill in (a) Light Gymnastics, to promote health and to give vigor and tone; (b) Athletic Gymnastics (in accordance with the law of Delsarte), for the attainment of grace, precision, and harmony, in action.

## 2. Voice Culture.

- (a) Respiration: Natural breathing; economy of breath; drill in deep, effusive, expulsive, and explosive forms, as a basis for voice work.
- (b) Voice culture: Exercises for the production and cultivation of open, pleasing, and musical tones; to avoid shrill and loud tones.
- (c) Articulation: Correct use of the articulatory organs; exercises upon elementary sounds, separately and in combination; syllabication, accent, and pronunciation; defects of speech.

## 3. Expression.

In Reading, Recitation, and Oratory. Modulation, inflection, emphasis, pitch, quantity and movement; qualities; application of tone effects; light and shade in tone; transitions; pause effects; facial expression; action and repose; naturalness; clearness.

Text-books: The books in use and for reference are Southwick's Elocution and Action, Stebbin's System of Expression, Fulton and Trueblood's Practical Elocution, Hudson's Shakespeare, Werner's Readings and Recitations, etc.

This department is open to all students in the Collegiate classes and to the second year students of the preparatory school. Twice a week for each class.

## MUSIC.

PIANOFORTE DEPARTMENT.
MR. AND MRS. E. L. BUSCH.

Grade L

Clavierschule, H. Wohlfahrt Bellaks Method; Koehler Op., 204; Loeschhorn Op., 186; Gurlitt Op., 178; Reinecke Favorite Melodics, including intget exercises at d Scales, Applications, etc.

#### Grade II.

Clementi Op., 36; Kuhlau Op., 55; Doring Etudes; Lemoine Op., 37; Lichner Pieces; Gurlitt Abum Leaves; Jadassohn Spring Flowers; Kullack Scenes from Childhood; Spindler Op., 93; Little Dances.

#### Grade III.

Divernoy Op., 120: Doring Op., 8: Behrens Op., 79: Bertini Op., 100: Loeschhorn Op., 65: Bach Little Preludes: Easy Sonatas by Haydy. Mozart and Beethoven: Schumann Album Op., 68: Reinecke Op., 154: Gade Op., 36: Jensen Op., 33; Löw Arranged Operatic Melodies.

#### Grade IV.

Behrens Op., 61, Books 3 and 4; Alois Schmitt Op., 16; Czeriw Op., 201: Krause Op., 9: Bach Preludes: Beethoven. Haydr. Mozar Sonatas, Gade Op., 18: Mendelssohn Sorgs Without Words: Grieg Op., 3. Op., 17: Jensen Wanderbilder, Kirchner Album Leaves, Modern and Popular Music.

#### Grade V.

Cramer Studies, Czerny Op., 740; Bach Well Tempered Clasichord, Steibelt 78; Weber Rondo in Eb.: Sonatas by Hunne., Scarlatti, Beethoven, Schumann Op., 32; Schubert Op., 94; Schumann, Chopin, Heller, Henselt, etc.

#### Grade VI.

Clementi Studies, Moscheles Op., 70; Beethoven, Liszt Thalberg. Scharwenka. Tausig. Rubinstein. Moszkowski. Tschaikowsky, Concertos, Ensemble Music, etc.

Pupils are not confined to any particular years or terms in passing from a lower to a higher grade.

#### MUSIC.

#### VIOLIN AND ORCHESTRAL DEPARTMENT.

Е. L. Busch, Director.

#### Grade I.

Mazas Method; Schradieks Technical Exercises; Easy pieces, Scales and Arpeggios in the first position.

#### Grade II.

Mazas Method; Schradicks Exercises: Scales and Arpeggios in more difficult keys and introduction of the third position. Pieces and Studies within the first and third positions.

#### Grade III.

Mazas Etudes Op., 36; Dancla Compositions; Scales and Arpeggios introducing the fifth and seventh positions. Classic and Popular Music within these positions.

#### Grade IV.

Kreutzer Studies: Scales and Arpeggios through all positions. Sonatas, Haydn, Mozart, Beethoven. Viotti Duets; Classical and Popular Music.

#### Grade V.

Fiorillo and Rode Studies; Spohrs Duets. Concertos by Viotti Rode, Kreutzer and Spohr, Brilliant Duos with Plano, etc.

#### Grade VI.

Solo and Ensemble Music by the best Cassic and Popular Composers. Modern Concertos and finishing department.

Harmony, Counterpoint and Composition taught according to Richter, Jadassohn, Oscar Paul, and other authorities.

Pupils advanced from a lower to a higher grade without loss of time and are not confined to any particular term or year.

#### II. VOICE CULTURE AND VOCAL MUSIC.

MISS GERTRUDE CRAWFORD.

True cultivation of the voice consists in the development of pure tone, and its easy, natural use and control in singing.

Attention is given to respiration as an art applicable to singing; position of mouth, and tongue, and control of the face in singing, emission of voice

Art. III

on vowels; exercises for uniting the registers; practice on sustained tones in the entire range of the voice, exercises in agility and velocity; exercises in articulation of consonants and vowels; study of delivery and expression; the formation of good style, etc.

Garcia's Vocal Exercises, Concone, Bordogni, Marchest, Panseron, and other technical works; songs of the English, Italian, French, and German Schools, church music; study of opera and oratorio.

#### TERMS.

18 weeks, two lessons	per we	ek, Pianoforte	and Voice
Culture, each .			\$22.50
Harmony in class			5.00
Use of pianoforte for	practice	, one hour dail	y 2.50

Tuition payable in advance.

No deduction will be made except in case of prolonged illness.

Instruction in Guitar and Mandolin playing given.

#### ART DEPARTMENT.

MRS. JENNY DELONY RICE, Director. (Students of the "Beaux Arts for Women" and "Julien" Ateliers, Paris.)

## Branches Taught.

Charcoal, crayon, pencil, pen and ink drawing, oil, water color, pastel, tapestry and china painting.

Special classes in industrial designing and illustrating, ornamental and decorative work.

The Art Club for study and quick sketching meets once a week, when lectures are delivered on Art History.

The full course covers four years, but students will be advanced individually, and no hindrance will be imposed upon those who can complete the course in less time.

#### COURSE OF STUDY.

#### First Year.

ELEMENTARY DRAWING-Light and Shade.

- 1. Construction of lines.
- 2. Drawing in outline from geometric solids.
- 3. Drawing in outline from casts.
- 4. Drawing in outline from still life.
- 5. Study in light and shade.
- 6. Perspective, theory and applied.

#### Second Year.

#### DRAWING AND PAINTING.

- 1. Still life groups from objects.
- 2. Landscapes from studies and nature.
- 3. Fruit, flowers and foliage from nature.
- 4. Perspective, lights and shadows.
- 5. Designs for wallpaper, carpets, etc.
- 6. Historic ornament, decoration.

#### Third Year.

PAINTING IN OIL, WATER COLORS AND PASTEL.

- 1. Heads from the cast, shaded.
- 2. Figures from the antique, shaded.
- 3. Still life studies in oil, water color or pastel.
- 4. Fruits and flowers from nature.
- 5. Landscape from nature and studies.
- 6. Original composition and design.

#### Fourth Year.

Portraiture from Life, Figure and Landscape Painting— Book Illustration.

- 1. Portraits from life.
- 2. Animals, landscape, marine.

- 3. Interior decoration.
- 4. Composition, genre subjects.
- 5. Illustration of books, magazines, etc.
- 6. Practical and applied design.

#### TERMS.

I.	Art alone per year	\$15.00
	Payable first term	10.00
	Payable second term	5.00

Those who pay the tuition tees for the course in Arthave the privilege of taking one or more studies in any of the other courses, subject to the approval of the Professor concerned.

 Students of the University having not less than eight recitation hours per week are not charged for instruction in the Art Department.

Pupils will consult Mrs. Rice with regard to the Department and materials needed.

#### TEACHERS' NON-RESIDENT COURSES.

The University offers special opportunities to all teachers in Arkansas. It will admit them to its regular examinations for admission to the Freshman class, or will send the examination questions to county examiners, who will submit them to teachers under the usual rules and return answers to the University. Teachers who pass the required entrance examinations may then matriculate and enter upon non-resident courses of study under the direction of the University Professors; and upon completion of one term's work in any branch, they will be examined upon said work and credited with it, if it comes up to the University standard.

After finishing three-fourths of the course for a bachelor's degree, such teacher-students may graduate by completing the course as regular resident students.

Non-resident study is pursued under disadvantages, and none but energetic and methodical persons, who are willing to practice much self-denial, can succeed in such work. Such courses of study are in many respects less thorough than study under regular instruction at the University. Yet thousands of persons who cannot attend college regularly are thus educating themselves, and the self-reliant habits of study and investigation acquired by successful work of this kind are of untold value.

Teachers accepting this ofter must obtain not less than two credits—two subjects passed for one term, or one subject for two terms), each year; else their names will be dropped from the rolls. Teachers whose vacation occurs—during the session of the University may supplement their non-resilient study by attending the regular classes.

# Preparatory School.

#### INSTRUCTORS.

W. A. Crawford, Principal, Mathematics.
G. A. Cole, Mathematics, Physiology and Bookkeeping.
Cener Holcomb, Latin and Mathematics.
Naomi J. Williams, Latin and History.
Mrs. E. W. Cole, History and Mathematics.
Mary A. Davis, English and History.
Lina Reed, English and Latin.
Mack Martin, Machinist Work and Forging.
B. N. Wilson, Woodwork and Foundry.
Gertrude S. Crawford, Vocal Music.
E. L. Busch, Musical Director.
Elizabeth Busch, Piano.

The collegiate teachers of the University assist in the Preparatory School whenever needed and it is practicable for them to do so. During the past year the following officers have rendered assistance. W. B. Bentley, Chemistry; S. J. McLean, Civil Government; Junius Jordan, Elementary Pedagogy and School Management.

The Preparatory School is intended, first, to prepare students for any of the courses of study taught in the University; second, to furnish to those who cannot take a more extended course, as good a general education as the limited time will permit, third, to prepare teachers for the public grammar schools of the State. To secure these ends, four courses of study are offered, viz. Arts (A), Engineering (E), Science (S), and Teaching (T).

The course in Pedagogy, School Management and Methods, has been arranged for students of nature age who cannot take a full course at the University, and who wish to qualify themselves for the work of teaching in the common schools. It is supplemented by practical lectures, illustrative work in primary classes, and a thorough investigation and discussion of all the methods involved in the ungraded schools.

Requirements for Admission.

I. Arithmetic.—Students are exammed in the whole of the Grammar School Arithmetic, and an accurate knowledge of all this is rigidly required.

Teachers preparing pupils for admission should require them to learn principles and definitions accurately, and to analyze every example capable of analysis, and should give them thorough drill in mental arithmetic.

- 2. English Grammar.—Maxwell's Elementary Grammar.
- 3. *Geography*.—The whole of some complete manual of Geography.
- 4. Reading, Spelling and Writing,—Proficiency in these subjects is tested by the examination in Grammar.

NOTE—Candidates for second year, general course, will be examined in Arithmetic, Algebra to fractional equations, Maxwell's Advanced Grammar, History of the United States, Descriptive Geography, Latin (Collar and Daniell), and two books of Plane Geometry.

Scientific and Engineering students are not examined in Latin, but in Physical Geography and in Bookkeeping instead. Students entering after the session has begun will be examined also in the work passed over by their classes.

#### ORDER OF EXAMINATIONS FOR ADMISSION.

Wednesday, September 20.—9 a. m., registration of students; 1-4 p. m., Algebra, Geography.

Thursday, September 21.—9-12 m., Arithmetic; 1-4 p. m., Latin.

Friday, September 22.—9-11 a. m., English Grammar; 11-12 m., English Composition; 1-4 p. m., United States History, General History.

#### DETAILED WORK OF COURSES.

#### FIRST YEAR.

Mathematics, 5.—Milne's Standard Arithmetic, reviewed; Wentworth's Higher Algebra to Fractional Equations: Phillips and Fisher's Plane Geometry, two books.

English, 4.—Maxwell's Advanced Grammar; Lamb's Tales from Shakespeare; four original essays per term, corrected and copied; Guerber's Myths of Greece and Rome.

Parallel Reading.—Longfellow, Courtship of Miles Standish: Whitner, The Bareton Boy: Kipling, Jange Book. Goldsmith, The Deserted Village; Cooke, Surrey of Eagle's Nest; Jewett, Story of the Normans; and selections from Irving and Pike; lives of the above authors.

Latin, 4.—Collar and Daniell's First Lessons in Latin.

History, 3.—Chamber's United States History and Hempstead's History of Arkansas.

Geography, 3.—Redway and Hinman's Natural Advanced Geography.

Bookkeeping, 1 .- Messervey's Bookkeeping.

Woodworking, 4.—Principles of carpentry and joinery; wood turning; pattern making; cabinet work. Sickel's Exercises in Woodworking.

Freehand Drawing, 2.—Practice work; outline drawing from models and machine parts; plans, elevations, sections, dimensions, etc.

#### SECOND YEAR.

Mathematics, 5.—Wentworth's Higher Algebra completed to Logarithms; Phillips and Fisher's Plane Geometry completed.

English, 4.—Raub's Rhetoric; five essays per term, corrected and copied: Burke, Conciliation with America. Macaulay's essays on Addison and Byron: Shakespeare. As You Like It; Tennyson, The Princess.

Parallel Reading.—Campbell, Gertrude of Wyoming; Scott, Ivanhoe: DeQuincy, Fligh; of a Tartar Tribe. Stevenson, Treasure Island; Hawthorne, House of Seven Gables; Dryden, Palamon and Arcite. Addison, De Coverly Pipers; Gordsmith, Vicar of Wakefield; lives of the above access.

Latin, 4.—Four books of Cæsar, or an equivalent; Bennett's Grammar and Exercise Book.

History, 3.—Barnes's General History.

Physiology, 2.- Martin's Human Body.

Chemistry, 2.—Williams's Introduction to Chemical Science; lectures and written work.

Pedagogy, 3.—Hewitt's Pedagogy, Gow's Morals and Manners, Late of Pestalogic School Inferests and Dallis, by King, and Arkansas School Law.

Civil Government, 2.—McLeary's Civil Government, Ark Usas atti The Nathor, and Johnson,'s History of Armillean Politics.

Founding, 2.—Molding; melting and pouring brass and mon; management of capona. Balland's Iron Founding, actures and practice.

Forging, 2.—Management of fire; drawing; welding; riveting; tempering. Lectures and practice.

Mechanical Drawing, 2.—Drawings of machine parts; lettering; line shading, etc.

NOTE.—In the above courses the figure after each subject in licates the number of hours per week.

#### SUBJECTS AND COURSES.

#### FIRST YEAR.

Subjects.	Hours per week.	Cor	urses R	lequir <b>e</b> d	1.
Arithmetic	11/4 2 11/4 4 3 4 3 1 1	A A A A A A	E E E E E E	s s s s s s s	T T T T T T T

#### SECOND YEAR.

Subjects.	Hours per week.	Co	urses F	Require	d.
A to 14 Geometry Rhetoric General History Physiology Chemistry Latin Civil Government. Drawing Shop	4 3 2 2 4 1	A A A A A	E I I. I I I.	ssssss s	T T T T

Note.-In this table: A, Arts; E, Engineering; S, Scientific; T, Teachers.

Special courses of study are not allowed in the Preparatory School, but students known to be in poor health or having physical defects, which interfere with their studies, are sometimes permitted by the Faculty to deter one or more, subjects of study and extend the course over a longer period.

Students who have at any time been curolled in the Preparatory School, must complete thirty-four hours of work before dropping preparatory studies; and studies in lower classes have precedence over higher ones. A student in the Preparatory School is a member of the highest class with which he has as many as nine recutations per week.

# The Medical School.

LITTLE ROCK, ARKANSAS.

#### BOARD OF TRUSTEES.

J. A. DIBRELL, M. D., Little Rock, Ark. WM. B. LAWRENCE, M. D., Batesville, Ark. WILLIAM THOMPSON, M. D., Little Rock, Ark.

#### FACULTY.

JOHN L. BUCHANAN, M. A., LL. D., President of the University.

P. O. HOOPER, M. D., Emeritus Professor of Practice of Medicine.

JAS. A. DIBRELL, M. D.,
Professor of General, Descriptive and Surgical Anatomy and
President of Faculty.

EDWIN BENTLEY, M. D., Professor of Principles and Practice of Surgery.

JAS. H. SOUTHALL, M. D., Professor of Practice of Medicine.

ROSCOE G. JENNINGS, M. D., Professor of Clinical Surgery and Dermatology.

C. WATKINS, M. D., Professor of Physical Diagnosis and Clinical Medicine.

JAMES II. LENOW, M. D., Professor of Diseases of Genito-Urinary Organs.

L. P. GIBSON, M. D.,
Demonstrator of Anatomy and Adjunct Professor of Anatomy.

LOUIS R. STARK, M. D., Professor of Gynecology. E. R. DIBRELL, M. D., Professor of Physiology.

FRANK VINSONHALER, M. D., Professor of Ophthamology and Otology.

T. N. ROBINSON,

Professor of Medical Chemistry and Toxicology.

W. H. MILLER, M. D., Professor of Obstetrics.

F. L. FRENCH, M. D.,

Professor of Materia Medica, Therapeutics, Hygiene and Botany.

S. H. KEMPER, M. D., Professor of Surgical Pathology and Bacteriology.

> CARL E. BENTLEY, M. D., Adjunct Professor of Clinical Surgery.

ANDERSON WATKINS, M. D., Assistant Demonstrator of Anatomy.

WILLIAM A. SNODGRASS, M. D., Assistant to Chair of Anatomy.

FREDERICK W. DORTCH, M. D., Adjunct Professor of Chemistry.

James H. Lenow, M. D.,

Secretary of the Faculty,

Little Rock, Arkansas.

#### TWENTY-FIRST ANNUAL ANNOUNCEMENT

OF THE

# UNIVERSITY OF ARKANSAS MEDICAL SCHOOL.

The Regular Winter Course of lectures will begin on Thursday, October 12, 1899, and continue six months.

Lectures will be delivered daily during the six days of each week.

The matriculation book will be opened from and after September 1st to students desiring to matriculate early and secure choice of seats.

In making this annual announcement the Faculty feel great satisfaction in referring to the continued success and prosperity of the Medical Department. The cordial indersement of the Arkansas Medical Society and the generous influence of the medical profession throughout the State are highly appreciated and encourage the Faculty to continue the arthrops labors they have so long and realously maintained.

First Year.—Anatomy, Practical
Four Year's Anatomy, Physiology, Chemistry,
Graded Physics, Histology, and Medical Ethics.
Course. Yen: Anatomy, Practical
Anatomy, Physiology, Chemistry, Materia Medica, Pathology, Obstetrics.

Third Year.—Materia Medica and Therapeutics, Toxicology, Obstetrics and Diseases of Children, Physical Diagnosis, Diseases of the Eye and Lar, Practice of Medicine, Surgery.

Fourth Year.—Review of all branches, Practice of Medicine, Surgery, Dermatology, Gynes dogy, Bacteriology, Urmology, Venerial Diseases, Diseases of the Nervous System, Medical Jurisportence.

As required by the rules and regulaMatriculations of the "Association of American
tion. Medical Colleges," students on matriculating are required to present
credentials showing that they are matriculates or
graduates of recognized colleges of literature, science
or arts, of high schools, academies, normal schools,
or equivalent schools, or that they have teachers'
certificates.

Graduates and matriculates in Medicine, Dentistry or Pharmacy, on presenting credentials showing such, are exempt from the entrance examination.

To avoid delay, students entitled to matriculate war' or examination are respiested to lying their certificates with them and present them or arrival at the college.

Students not entitled to exemption, as hereinbefore provided, are required to pass an entiance examination, with the following requirements, the writing of an English composition of not less than 200 words; the translation of easy Latin prose, a

knowledge of the elements of Arithmetic or Algebra, and of elementary Physics.

Location. The City of Little Rock is conven iently situated in the center of the State, and railroads enter from every direction, making it easily accessible.

It has a population of more than 40,000, and has always been classed as one of the most health-til cities west of the Mississippi River. Few places an boast of better public schools, colleges and universities than Little Rock. All the eleemosynary institutions of the State are located here. These are the School for the Blind, Deaf Mute Institute, and the Insane Asylum.

Medical School Building. The new structure is an imposing edifice, three stories in height, constructed of brick and admirably arranged for the convenience of both students and instructors.

It has a large lecture hall, a fine amphitheater with chairs, a library, a reading room, a museum, several dissecting rooms, all well lighted and ventilated. In fact, it is designed to be a modern and model medical college building. It is situated on Second and Sherman streets.

The Logan H. Roots Memorial Hos-Hospitals. By the munificence of the late Col. Logan H. Roots and the benevolence of his widow, the City of Little Rock is to have an elegant public hospital. The commodious building is now completed.

The Medical Department of the University is fortunate in having this hospital situated on lots adjuming their own building, thus promising greatly increased clinical facilities.

The Little Rock Infirmary, designed solely for the treatment of acute diseases, has a capacity of fifty bods. This hospital is splendidly equipped and furnished with modern conveniences and improvements, is in the very best sanitary condition, and under the supervision and management of trained nurses, Sisters of Charity.

The Pulaski County Hospital, erected at a cost of some \$30,000, is a handsome brick structure, well arranged, complete in all its equipments, and has a capacity of 200 beds.

Accidents from railways, marine patients, and the sick and injured from the city, county and State, find in these hospitals shelter, food, raiment, and that Christian attention so cheering and comforting in sickness and distress.

The inmates of these different institutions embrace all classes and conditions of people white, colored, male, female, adults and children and with them are found almost every form of malady except quarantinable diseases, which are otherwise provided for.

"The Isaac Folsom Clinic." This clinic is thus designated in honor of the personal life of Dr. Folsom, and the friendship and interest this honorable physician and philanthropist entertained for the Medical Depart-

ment. He legally executed an instrument of writing endowing this clinic with \$20,000, thus perpetuating the Israe I Isom Clinic as a part of this institution.

Every student of this department is required to attend this clinic, and each candidate for graduation must pass an examination on the clinical instruction therein received, and this fact will be specially mentioned on the face of his diploma.

The daily instruction in this clinic is thoroughly practical, and is attended by a large number of outdoor patients from the city and surrounding country. It embraces a wide range of diseases and injuries.

Methods of Teaching.

Instruction will be given by didactic and clinical lectures, practical work in the dissecting room, chemical and physiological laboratories, and by daily

quiezes upon the subject of preceding lectures.

When the subject will admit of it, each branch will be so illustrated by means of diagrams, charts, models and instruments, as to address the understanding of the student through the medium of sight as well as hearing.

The expenses of living in the City of Expenses of Little Rock will, of course, vary according, Etc. ing to the views and habits of students.

Good board, at the present time, including lodging, fuel and lights, may be had at a convenient distance from the College, at from \$410 \$0 per week, and from \$13 to \$18 per month.

Students on their arrival are requested to visit the University building, corner Second and Sherman streets, where a list of parties desiring to board medical students will be found.

Persons desiring further information are requested to address the Secretary of the Faculty.

#### TERMS.

7	he	fee	for	a fu	ll c	our	se c	of	lect	ures	will	be:
Genera	ıl Ti	cket.									\$5	50.00
Matric	ulati	ion T	icket	(paid	bu	tono	e)					5.00
Demoi	istra	tor's	Tick	et (fo	r ea	ich c	ours	e).				5.00
Hospit	al T	icket	· cac	h cour	~(							3.00
Gradu.	tion	1 Fee										25.(X)

No variation is made, under any circumstance, from the established fees of the College, they having been placed originally at the very lowest figure commensurate with the interests of both student and College.

For more specific information and catalogue apply to

Jas. H. Lenow, M. D.,

Secretary of Medical Faculty,

Little Rock, Ark.

Note—Alumni are requested to inform the Secretary of their present post of and cadress, and of any change of location, in order that they may have the annual catalogue forwarded them regularly.

# Law Department, University of Arkansas,

LITTLE ROCK, ARKANSAS.

JOHN L. BUCHANAN, M. A., LL. D., President of the University.

Dean:
Mark Valentine,

#### Lecturers:

JNO. M. ROSE, THOS. B. MARTIN,
JNO. B. JONES, W. T. TUCKER,
SAM W. WILLIAMS. W. S. MCCAIN.

The Law Department of the Univer-Location. Sity of Arkansas is located at the City of Little Rock, the capital of the State, and it is beheved that the advantages here for the study of the law are as good as in any city of its size in the United States.

This department is under the supreme Control and control of the board of trustees of the Government. University and in immediate charge of the Dean, who is responsible to the board for the good conduct of the school, and is expected at all times to defer his private interests to its welfare.

This will be by thorough study of the Method of Text-books and rigid daily examinations, until it is seen that the student thoroughly understands and has digested what he has read.

While it will not, strickly speaking, be a lecture school, there will be one or more lectures on each branch of the course delivered by some one of the eminent lawyers whose names appear above as lecturers.

The full course is two years divided into the Junior and Senior terms.

Terms begin the first Monday in October and end the first Friday in June.

The Jumor course is intended to enable the student to thoroughly ground himself in the principles of law and will be the hard year.

The Semor year will be devoted to the study of the practice and to more elaborate study of as many of the more important branches of the law as the time allotted will permit.

Most courts will be held often enough to enable every member of the Semon class to act as counsel at least once in a case involving that branch of law then being studied, and toleast two most courts will be held during the study of each branch in the Senior course.

The Judicial Department will consist of a Circuit and a Supreme court. The Dean will act as Judge of the Circuit court, and the other officers

besides rounsel will consist of a Sheriff and Clerk, the latter of whom will be required to keep a complete record of the proceedings.

Cases must of necessity be tried on agreed statements of fact, and with this exception every step will be in exact conformity to the practice in the Circuit courts of the State.

The Supreme court will consist of a Chief Justice and two Associate Justices selected from the class. The other officers besides counsel will consist of a Clerk, a Sheriff and a Reporter. The Reporter will be required to digest all decisions, make abstracts of opinions delivered, and when the case is of such nature as to be of interest to the public of to the legal profession, he will furnish a copy of the opinion to the Little Rock Greetz for publication.

JUNIOR YEAR.—Laws and JurisprudText-Books. ence of England and America (Pillon).—Blackstone (Cooley).—Evidence (Cooley).—Evidence (Cooley).—Evidence (Cooley).—Torts (Bish f).
—Equity (Bispham).

SENIOR YEAR.—Pleading (Gould).—Suit in Liputy (European Summation's Federal Courts, Command Law (Chr. 1). Corporations (Chr. 2).

Domestic Relations (Supplier). Real Property (Lipute 1). Bills and Notes (Northern Sales (Benjamin).

In addition to the course of instruction important incidental advantages are offered here. The student has tree access to the State libraries. All the State courts and the Federal, District and Uncuit courts are held here and are in session from October to June. By attendance on the State Circuit courts the student learns all of the modes of procedure that cannot be learned in the moot selecting and empannelling the Petit Jury, selecting and swearing the Jurors for a particular case, examination of witnesses, exceptions to evidence and to the rulings of the court in the progress of a trial, preparation and arguments of instrations, and, in short, by steady attendance on the various courts, the student gets that knowledge of the practice which can be searned only in the courthouse, and for lack of which the voing lawyer is so hindered and embarrassed when he begins practice.

Expenses. Tuition—Fifty dollars a term, ten dollars in advance upon matriculation and five dollars per month for the rest of the term, or forty dollars in advance in full for the term.

The cost of living in Little Rock is about the same as elsewhere in the State. Board and locking in private families can be had at from three to tive dollars per week.

For further information, address

MARK VALENTINE, Dean,

Little Rock, Arkansas.

# Branch Mormal College.

PINE BLUFF, ARKANSAS.

#### FACULTY.

NORMAL DEPARTMENT.

- J. C. CORBIN, A. M., Principal.
  - J. C. SMITH, A. B., First Assistant.
- T. G. CHILDRESS, L. I., Second Assistant.

Anna C. Freeman, L. I., Third Assistant.

> Louisa M. Corbin, Fourth Assistant.

#### MECHALICAL DEPARTMENT.

C. F. Hot GHTON, Superintendent.

W. S. HARRIS, Assistant Superintendent.

E. K. Braly, Machine and Blacksmith Shops.

Lorenzo Ellis Engineer.

The Branch Normal College is a General. department of the University of Athausas, established pursuant to an Statement. act of the General Assembly of the State of Arkansos, approved April 23, 48 to and has been in operation since September 2 1875. Its primary object is the training of teaches for efficient's ryice in the colored public schools of the State the law referred to having been enacted with special reference to the convenience of the confer classes. For the jenjos esteariving out the intent of the irw, turning is made free to all applicates, the only requirements for a bussion being actible age and quality atter and appointment from suc of the county pides, and the prement of their presection to or ks. Other stillents par, in addition to the above, \$1 per month in advance.

The school property consists of a Location, beautiful tract of tractes of an Imil.

Etc. In the suburbs of Pine Bluff, Joseph on County, Ark., and a few rods from the junction of the Mission Proposal the State as and Southwestern of incress of the short length of the Mission Proposal track of helding, completed in 1881, and completel partially 30 (22) to most the hundronest educational educes in the State and the hundronest education and educes in the cloth light dand and would tell the outsines one large assembly room, four recitation rooms, and clother in the mid-south makes. The building is of both a partial short of and in a rings in Malarma.

grante and est, with improvements and furniture, \$12,000. The furniture and other equipments are of the best modern style.

The districtory, a handsome brick building of seventeen rooms, and the Mechanical Department building, are upon the same grounds.

The Normal course of study is intended to local full e-puralent to a regular college course up to and in helmy the Sephonore year, the only difference being the substitution of Pe laggey for Greek and the lagher mathematical branches. The college course also to this the usual studies of the last two years. Fifteen classes have graduated from the institution, and the mental is at a total inpiving prominent positions in life. The number distudents for the year 1897-'98 was nearly 200.

The library consists of over 3,500
The Library.

The Library.

The Library.

The Library.

The Library.

The library consists of over 3,500
The Library.

The library consists of over 3,500
The Library.

The library of the Constitute Contour Distributionary, etc.

It also has a fine collection of the works of stream and and its Shake point. Minon, living, to pet D. ones Library and the Prince combined in the library of the Prince combined in many valuable text and to be removed as a cosmolote stream. A small collection to the more decided who have the last stream and some at which are displayed a valuable support of apparatus has been added.

to the clocational resons is of the institution, consisting of an air pump, electrical machine, storical but ometer, in theres. French macris epe. A-Ray apparatus, spectroscope, sets of weights and measures, common and metric, etc. The outfit of the Mechanical Department is not surpassed, it equalled in quality, by any in the State.

The Reading Room has been fitted up in elegent style and supplied with quite a miniber of almable newspapers and periodicals, and of all has furnished by their publishers. Among these in means the force of the function points of the Gazette, Little Rock; Globe-Democrat and Republic, Saint Louis; The Tyler, Detroit, Mich.; Popular Educator, Boston; Lippincott's Educational Quarterly, American Student, New York; Weekly Echo, Pine Bluff; National Baptist, Philadelphia; Southern Review, Helena; American Machinist, Scientific American, Popular Educator, Nation, the scientific publications of the State of Arkansas and of the United States, etc.

Campus, twenty acres; college buildGrounds,
Buillings

In the second plants definition

and

(brick), six rooms; iron-clad storage

Equipment.

In the second plants definition of the component plants of the constant plants of the constant plants of the constant plants of the constant plants.

need it is department. Spot range and control onto the automost all instruments, paint, or miscoline do, mandolin, flute, guitar, \$1,000.

The dorinitory for female students is Dormitory under the supervision of the Principal and his wife. It is a handsome brick for Girls and Boarding structure, such tent for the account of dation of thirty or forty students. House. Board bills are payable monthly in advance, and no deduction is made for loss of time less than the treat Carls staying in the firmtent are required to Loop their own to the unit the hills clean and to especial through the diming to the di-Littlian That it are tell to firmship moved . It is a minder, asbett a compa to furniture in their rooms. They are not to visit call that significant is the significant of the significant significant in the significant This is much than I'm thank it was it is visit in town except by permission. The charge for mediane and people that me to the tinued. Girls who wish to board elsewhere, must

The female students of the institution here faily training in houseleeping, Domestic Training, Plain Needle- This department is under the superwork and into i lence of Miss Louisa M. Corbin, Art Needlea graduate of Ann Arbar, Mich. The work. cient number of Wheeler & Wilson and Singer Seware Machines and a liberal supply of all necessors are essential. A health the sources of the department has been very borded, and it has had many specimens of the work on exhibit a These students als accorded talk mistration in typewriting from Professor T. G. Childress.

The operations of this department are

Mechanical under the aperimendian of Projectopartment.

Department. Soil C. F. Houghton, Superiment into Mechanic Arts at Fayetteville, assisted by Professor W. S. Harris, a graduate of the Milker Minure Labor School, or Virginia, and Professor T. K. Bridy, a graduate of the University of Arkansas.

The shop building was completed in February, 1892. It is of brick and covers a plat of ground 70 by 70, comprising a wood shop 35 by 35, a founding 25 by 25, a build shape 25 by 25 and a court 35 by 20 occupying the remaining space.

Wood Shop.—Twelve benches, with complete set of tools for each, a double circular sawing

machine, sendi-saw, barel-saw, shaper, carving machine, baz-planer, pattern lathe, six turning lathes, and many necessary small tools make upthe equipment in this department.

A Since Twelve Builds trages are in position, the blast roung supplied by a blower, and the similar frawn on by a large exhaust time. Bearles the usual output of invils hammers, tongs, etc., there is a Build epin hishear and bar catter capable of catting of issue, but non, by its seach straper in, or of punching a system his de in A such mon.

Machine Shop.—The equipment consists of a 15-me increase shaper, a 25-me increase shaper, a 25-me in the shaper and 26-me in drill press, a 15-me in the shaper turner below, a 14-by remain engine and e. 2 by 5-hand bothe, universal saling machine currer and reamer grander, twist drill at a for, power analysis necessars in machine shop work.

Heating and Power Plant.—This consists of the perfect engines of the Esquirer each through use power tollinks of the Esquirer each through use power tollinks in the same at a light demand. The pipul for to by derive solution of that the water passes from eather pipulp is not the through a feel water heater to the buildes, and the collinst pipulp is a same geldful the exhaust term from the engines can be use in their tiple at the feel water or to heat the shops.

Water Supply.—In the court of the shop building as a new horse tubular well, which has

nishes the gallons of water per indicabilitying it to a tank thirty to radiove ground, holding 8.000 gallons.

Sanitary Provisions.—The shops are thoroughly well lighted, ventilated, heated, and ir another section is made to all limitings and the almost dant water supply is used to instruct deniline in wash room and water closet.

The courses in the department are as follows, viz:

- (a) A course in general shop work, extending over three years, followed by a fourth year's work in an extra shape along the shape the shape the shape design to have his trade intelligently and to acquire a sound basis for it.
- (b) A three years' course in general shop work, followed by a fourth year's work in the manarillent of holes of the sound bridge syst in This course is intended to train a majorial for the practical work of foremen or engineers.
- (c) A course in general shop work, extending over three years, together with class-room work in the theorem and the restrict the limit of the first that the second matter than and in laying out series of practical exercises.

For fuller information respecting this and other the fitter of the fitte

General Exercises.

In addition to the regular class exercises prescribe him the course of study, there are regular less ins in vocal mussic, which are open to all the students.

The general exercises also include a review of a Sabbath school lesson, review of the events of the week, calisthemics, music, and drawing. Music upon astronomist the organ, piano, flute, guitar, etc.,

is extra, but very reasonable in price. There are two interary societies, the Junior and Senior, which rold weekly meetings and affordex ellent opportunities for practice in oratory, debate, and composition. It is repuired that every student shall become a member and attend the meetings of one of the societies.

The length of the vacation allows the advanced students an opportunity to engage in teaching, and a large proportion of their number have done so during the last five years. In nearly all cases they have given satisfaction and conduct their schools with a fair degree of success. The Normal students have also assisted in the work of the institution itself as a part of their training.

It will be a great advantage to the institution if the various county judges will take a special interest in seeing that their counties are represented. The forms for appointments and apportionment of benenciaries are the same as stated in this catalogue. The proper blanks for making the appointments will be furnished, together with all necessary information, on application to the Principal.

> J. C. CORBIN, A. M., Pine Bluff, Arkansas,

# Register of Students.

Abbreviations.—M. A., Master of Arts; M. S., Master of Science; B. A., Bachelor of Arts; B. S., Bachelor of Science; M. F., Mechanical Engineering; E. E., Lectrical Lagmeering; C. E., Civil Engineering; Agr., Agriculture; Hort., Horticulture.

#### GRADUATES.

Ross, W. A. . . . . . . M. A. . . . Booksboro, Washington

Post Office.

County.

Course.

Name.

SENIORS.
Bev. A. W B. A Springdale. Washington
Blaz. J. H C. F Decatur Benton
Fillmore, C. RB. SPine BluffJefferson
Huie, R. W., JrB. AArkadelphiaClark
Kirby, F. BB. AHarrisonBoone
Medearis, R. SB. ASummersWashington
Patterson, Daisy BB. AFayetteville Washington
Sanders, C. FB. AHot Springs Garland
Stewart, I. F
Weems, C. NB. ADardanelleYell
Wiley, Winona MayB. AFayetteville Washington
Wilmot, J. CF. ERogersBenton

NOTE—The names of students in the Medical and Law Departments at Little Rock and of the Branch Normal College at Pine Bluff are not included in this Register, but are published in the special catalogues of these Departments.

Wood, Guy B......B. A.....Hot Springs .. Garland

#### JUNIORS.

Abernathy, G. C	В.	A Warren Bradley
Barry, Katherine B	B.	AFayetteville Washington
Victes, Madge	B.	AFayetteville Washington
Boatwright, W. V	B.	AVan Buren Crawford
VBrown, E. T	C.	ESweet HomePulaski
Burgess, Irene G	B.	ASt. Paul Madison.
VCollier, J. T	B.	A Washburn Sebastian

## REGISTER OF STUDENTS .- Continued.

Name.	Course.	Post Office. County.
		.Poplar Grove, Phillips.
		.Little RockPulaski
		SummervilleCalhoun.
		.Fayetteville Washington
		. Bentonville . , . Benton
V. Sec. 11 11	RS	.Star CityOklahoma
Jay. W. D		
VIII TO THE TOTAL TO THE	D A	.Jonesboro Craighead
VIoner, J. L	D. A.,,	. Johnston Craighead
WILDIE TO 11 12	. D. P	Herena
Hopsfall, F		
		.FayettevilleWashington
		. McDaniel St. Francis
Means, L. D	В. А.,.	.Charleston. Franklin
Merritt, Meah	Normal,	.Buckner Columbia
		. Van Buren Crawford
		.Pine Bluff Jefferson
Owens, L. I		
		.FayettevilleWashington
P. Mack, R. L	В. А	. L'ayetteville Washington
Yaray. Lizzie N	B. S	Fayetteville Washington
TRACEBURY, W. H	B. A	.Fayetteville Washington
lesser, V. Florence	.B. A	,Fayetteville Washington
Saxon, R. L	B. S	.SmackoverUnion
Krian, C. C	B. S	. Moline Illinois
<b>У</b> парр, І. Н	. C. E	SnappWoodruff
Favior, D. W	В. А	Pine BluttJetterson
Towler, G. F	. B. A	.Fordyce Dallas
Treadway, W. A		
		.FayettevilleWashington
For the same of the same of	N. 1111	. Fayetteville Washington
Webster, Olive S	R A	Marvall Philling
Voung Daier	p c	Springdale Washington
Toung, Daisy	D. S	Springdate wasnington
	SOPHOMO	RES.
An w. Same I	.B. A	. MagnoliaColumbia
		.FayettevilleWashington
1) L. R	M. E	Bentonville Benton
Access 1 1 1	Hort	.Washington Hempstead
CK. J. Y	IUIL	. washington itempstead

# REGISTER OF STUDENTS.—Continued.

		Post Office.	
Brown, H. S			
Burton, J. B	North all .	H. re	.11 :,
Beavers, Agnes	.B. A	. Charleston	.Franklin
Cochran, V. II	.C. E	.Gravett	. Benton
Davis, B. F			
Dean, A	.B. A	.Frostville	. Lafayette
Tiwn. A. I	Hent	S'c. 11	1/
Freeman, W. A	.B. S	. Paris	. Logan
Gardner, C. F	F. E	Fort Smith	Sphast
Gray, D. L., Jr	.B. A	.Little Rock.	Pulaski
Goddard, Dora Lee	.Normal .	. Prairie Grove	. Washington
Henderson, G. D. M	B. A	. Little Rock	. Pulaski
Hobbs, W. D	. Normal .	.Bentonville	. Benton
Hudgins, W. H			
Kerrott, J. B	.B. S	Little Rock	. Pulaski
Knott, E. C	.B. A	Bentonville	. Benton
Martin, E. G	.B. A	Little Rock.	Pulaski
Matthews, G. W	.B. S	Jonesboro	. Craighead
McAndrews, J. A	B. A	. Bentonville	. Benton
McRae, C	C. E	.Mt. Holly	.Union
Morrow, Lulu	.B. A	Fayetteville .	.Washington
Mundt, L. J			
Pittman, C	. B. A	.Prescott	. Nevada
Ross, H. L			
Ross, Lucy I	В А	Bons, shore.	W. A. 11 21-1
Sadler, C. L			
Sanders, T. E			
Sellers, C			· ·
Smith, Fannie Marie			
Stubblefield, Demie T			
Taylor, W. E			
Tilley, Mary			
Treadway, T. C	.E.E	.Little Rock	. Pulaski
Trimble, T. C., Jr			
Vaughan, A. J			
Wasson, A. W			
Wiley, Pearl	B. S	Fayetteville .	.Washington

Name.	Course. Post Office.	County.
Wilkinson, N	B. A CharlestonF	ranklin
Wilson, H. H	E.ERussellvilleP	ope

FRESHMEN.				
Abernathy, J. A	.B. AFordyce Dallas			
A b R	B. A Osage Mills Benton			
Alden, Minnie	.B. A Osage Mills., Benton			
Austin, Miriam Edith	.B. AVan Buren Crawford			
Barton, R. B	.B. A Mound City Crittenden			
Bates, W. E	C. EFayetteville Washington			
	B. A Hackett Sebastian			
	B. A Lockesburg. Sevier			
Brown, L. I.	M. E Sweet Home. Pulaski			
Buchanan, Mary .	B. ABoonsboroWashington			
Buchanan, H. E	B. A Boonsboro Washington			
	M. EBoonsboroWashington			
Castleberry, J. L	B. AOil Trough Indep'dence			
Cartwright, W. W	.B. AMt. ViewStone			
Clancy, W	C. E Fayetteville Washington			
Clayton, J. M	B. A Eureka Sp'gs Carroll			
Cook, Birdie Bertha	.B. A Bentonville. Benton			
	.C. E Howell Woodruff			
Crandall, Bonnie May.	.B. A Harrison Boone			
Curry, C. C	E.E Fayetteville . Washington			
	C. E Little Rock Pulaski			
Daniel, D. J	B. ALonoke Lonoke			
Davis, Pearl Reed	B. A Paris Texas			
Dear . L. J	B. A Frostville Lafayette			
Dodd c. J. II	Normai Morrilton . Conway			
Do's and J. A	Normal Huntsville Madison			
Durn. J. L.				
Fl. 18. W. Y	E.EFayetteville , Washington			
Parest, Daisy	Normal Huntsville Madison			
Galloway, Rowena	B. AFayetteville Washington			
Gibson, F. I	Hort, Dardanelle Yell			
Goddard, Kate	B. A Prairie Grove Washington			

<sup>·</sup> Deceased.

Name.	Course.	Post Office. County.
		. Prairie Grove. Washington
Govan, J. F	.B. A	.Helena Phillips
Hayes, G. G	.E.E	.NewportJackson
Hamilton, H. H	.M. E	.Nettleton Craighead
Hawthorne, J. H	.Hort	. Jonesboro Craighead
Herring, B. L		
		.Fayetteville Washington
Hogg. H	.B. A	.Altheimer Jetterson
Hust, A. S		
Johnson, A. E	.B.S	.CaglesvillePope
Johnston, J. E	.Normal .	.N. Lewisville, Lafayette
		.Fayetteville Washington
Jones, O. E		
Kelley, E. L	.B. A	.GoshenWashington
Lake, Horton	.B. A	.Fayetteville Washington
		.MaynardRandolph
Martin, C.B	.B.S	. Mena Polk
		. BatesvilleIndep'dence
		.BatesvilleIndep'dence
		. McAlesterInd. Ter.
McCall, J. K		
		.Huntington Sebastian
		.Fayetteville Washington
		.FayettevilleWashington
Melton, Hattie C	.B. A	.FayettevilleWashington
		.FayettevilleWashington
Moon, A. R		
		Boonsboro, Washington
Munn, M. J		
Munn, C		
Nelson, R. J		
Newman, L. L		
		.Fayetteville . Washington
		.Fayetteville Washington
		. Jonesboro Craighead
Pyeatt, H. R	.B. A	. Boonsboro Washington
		.BucknerColumbia

<sup>\*</sup>Deceased.

Name.	Course.	Post Office.	County.
Sedwick, T. D	.B. A	.Fayetteville .	. Washington
Smith, C			
Staggs, P. T			
Stephens, C. R			
Stephens, R. A			
Streepy, J. P		-	
Stubblefield, G			
Sutton, Mabel			
Swan, J. S			
Thorn, W. T	.E.E	Shawnee	. Oklahoma T.
Tilley, Ada C	B. S	.Rhea	. Washington
Tilley, H. L			
Trimble, G. M	.C.E	.Lonoke	. Lonoke
Vaulx, Susie E	.B. A	. Fayetteville .	. Washington
Warriner, R. B		*	
Walker, J. W			
West, A. L			
Wilson, W. E			
Wood, S			
Worthley, F. E			
			Δ.

#### SPECIAL.

Beakley, W. A B. AWalnut Ridge Lawrence
Cunningham, Nellie R., B. A Eureka Sp'gs . Carroll
Davies, EdithB. AFayetteville Washington
Hamilton, May Fort B. A Fayetteville Washington
Hill, LolaB. AFayetteville Washington
Moore, LucyB. ABoonsboroWashington
Oliver, BessieB. AFayetteville Washington
Scott, MargaretB. A Fort Smith Sebastian
Stockard, G. GB. A Nevada Missouri
Triplett, C. HB. APine BluffJefferson
Turner, B. EB. ACypertPhillips
Vincenheller, G. A, B. S.,Fayetteville Washington
Wade, L. AB. AFayetteville Washington
Wood, CoraB.SFayettevilleWashington
Woolum, J. BE. EVan BurenCrawford

#### VOCAL MUSIC.

, ,	VIII MICORCE	
Name.	Post Office.	County.
Askew, Nancy	. Magnolia	Columbia
Austin, Miriam E	.Van Buren	.Crawford
Beakley, W. A	.Walnut Ridge	Lawrence
Chandler, Mrs. E		New York
Connor, Kate		
Davies, Edith	.Fayetteville	Washington
Davis, Pearl R		
Dickinson, Georgia		
Duncan, Anna		
Duncan, Mrs. L		
Eason, Evelyn	.Fayetteville	Washington
Jordon, Nell		
Lake, Louise		
Lackey, Daisy		
Moore, Betty	Biorgan	
Phillips, Mamie	.Fayetteville	Washington
Purdy, Lizzie		
Reynolds, Nora		
Vincenheller, Jean		
INSTRU	MENTAL MUSIC.	
Baker, Sadie	.Alma	Crawford
Baum, Florence	.Fayetteville	Washington
Bell, Anna		
Cook, Birdie		
Davis, Claud	.Fayetteville	Washington
Davis, Maud		
Dickinson, Georgia	.Little Rock	Pulaski
Dickinson, T. T		
Guilliams, Savannah		
Hamilton, Eileen	Favetteville	Washington
Hamilton, Mamie	.Fayetteville	Washington
Hill, Ethel		
Hill, Lola	.Layetteville	notgrudes W
Holcomb, Cener		

Kell, Bessie......Fayetteville ......Washington

Name.	Post Office.	County.
Kly . 1 d	Regers	Benton
Lake, Horton	Fayetteville	Washington
Lake, Louise		
Leverett, Rose		
Mitchell, Sibyl	Fayetteville	Washington
Moore, Elsie		
Moore, Betty		
Morrow, Chas		
Rees, Margaret		
Scott, Maggie		
Vaughan, Daisy		
Vaughan, Mollie	Fayetteville	Washington
Wood, Cora		
Yares. Hare.		

#### ART.

Baker, Rivers	AlmaCrawford
Beakley, W. A	.Walnut Ridge Lawrence
	Palestine , St. Francis
	SpringdaleWashington
	Lamar Johnson
	Fayetteville Washington
Davis, Mary	FayettevilleWashington
	Little RockPulaski
	Little RockPulaski
	Little RockPulaski
	FayettevilleWashington
	FayettevilleWashington
	Hot SpringsGarland
	Dutch Mills Washington
	Huntsville Madison
	Little RockPulaski
Goddard, Dora L	Prairie GroveWashington
Hamilton, H. H	NettletonCraighead
Hill, Lola	FayettevilleWashington
Horsfall, Frank	HazenPrairie
Kantz, Willie	FayettevilleWashington

MOTOT DR OB	0101713.1101	Committee.
Name.	Post Office.	County.
Matthews, Lulu	Hot Springs	Garland
Mesler, R. D	Favetteville	Washington
Moore, Mary Lucie	Boonsboro	Washington
Morrow, Lulu	Fayetteville	Washington
Neeley, Bessie		
Oliver, Bessie,	. Layetteville	Washington
Patterson, Daisy	Fayetteville	Washington
Streepy, Paul	. Hot Springs	Garland
Survey Mach	. Paveresine	WHington
Wiley, Pearl	Fayetteville	Washington
Wilson, Myrtle	. Clarksville.	Johnson
Twenty-nine counted twice	ee.	

### SUMMARY FOR SESSION 1898-199.

Graduate	I
Same and the same	13
1. 1. 1.	
Sophomores	43
Freshmen	90
>	
V + 1 M + 1	
I . Was a Massacratic	299
\1'	> ~
	281
Names Counted Twice	
Total	225

#### BY COURSES:

Master of Arts	
Ban to Att	į
Bachelor of Science 20	0
Bachelor of Mechanical Engineering	
Bachelor of Civil Engineering	4
Bachelor of Electrical Engineering 20	0
Name	
Bachelor of Scientific Agriculture	7
Special Arts	2
Special Science	2
Special Music and Painting 24	
Total22	5

## Preparatory School.

#### SECOND YEAR CLASS.

Name.	Course. Post	Office. Co	unty.
Abercrombie, J. S	ABryan	Salin	e
Adams, R. M	\ ()/ark	Fran	klin
Austin, W.S	E Gravet	tBente	on
Ball, C. C	ARaven	denLawr	ence
Banks, M. C	A Wrigh	tsvillePulas	ki
Bell, Margie	.AWaldr	onScott	
Bibb, Dora	AFayett	evilleWash	ington
Blanchard, Fay H	A Fayett	eville Wash	iagton
Bowles, G. G	A Tvio	Line	11.
Bradshaw, C. O	A Toltec	Lono	ke
Brewster, H			
Brooks, Effie			
Brooks, Fred M	A Horat	ioSevie	T
Brown, Emma	A Mena.	Polk	
Burton, P. D	A Hope	Hem	pstead
Biz C. A. K	W L	celuigHen	pstead
Byrnes, Emma	AFayett	evilleWash	ington
Campbell, A. J	A Fayett	evilleWasl	ington
Cazor', Visian	Lama	John	- ON
C.2011. S. G	Laran	John	SOL
Clayton, W. D	A Hardy	Shar	р
Cleveland, Rhea	A Fayett	evilleWash	ington
Coombs, H. F	EBatesv	illeInde	p'dence
Cowgill, E. P			
Cox, T. N	ALittle	RockPula	ski
Cunningham, B. L			
Davies, Mary Lou			ington
Davis, Claude	SFayett	evilleWash	nington
Davis, Hill			
Dews, Colin			
Dickinson, Georgia M.			
Donham, W. R			

Name.	Course	. Post (	Office.	County.
Droke, Leila	A	. Fayette	ville	Washington
Dunn, W. F		. Arkade	lphia .	Clark
Dykes, J. A	T	. Kingst	on	Cleveland
Elliot, F. E	E	. Hot Sp	orings.,	Garland
Ellis, J. R	E	Pine B	luff	Jefferson
English, Laura	Δ	.Dutch	Mills	Washington
English, Margaret	A	. Dutch	Mills	Washington
English, Artelee	A	<b>D</b> utch	Mills	Washington
Evins, Mamie	A	. Fayette	ville	Washington
Farley, J. W	Т.,	. Trinch	ent	Bentor.
Frazier, Ada				
Freeman, Robert	A	Mt. Ho	lly	Union
Green, C. B	E	. Blanch	ard Sp's	gs Union
Hanesworth, May	T	. Fayette	eville	Washington
Hannah, C. W	т.т	. DeQue	en	Sevier
Harvey, W. R	A	. Marsha		Searcy
Henderson, J. R	E	Hot Sp	rings	Garland
Hill, V. D	A	. Clarksv	ille	Johnson
Hill, H. B	A	.Fayette	ville	Washington
Hill, Ethel	A	.Fayette	eville	Washington
Holland, W. J	T	.Barber		Scott
Horn, H. M	S	. Marsha	11.	1,10,0%.
Jackson, Wilburn	E	.Boonsh	oro	Washington
Jagerfeld, Carl von				
Jones, Effie				
Jordan, H. P				
Jordan, Grace	A	. Fayette	ville	. Washington
Jordan, Nellie	A	. Fayette	ville	Washington
Kantz, Willie				
Kennerly, R. C				
Key, K. C				
Kidder, E. D				
Kimbrough, W. W				
Kindrick, E. L				
Kitchens, W. L				
Klyce, D. E				
Knesal, Ada	A	.Fayette	ville	Washington

	Course. Post Office. County.
Lake, Louise	A Fayetteville Washington
Lang, Minnie	AFayettevilleWashington
Lester, Roy	AN. LewisvilleLafayette
Leverett, E. V	E Fayetteville Washington
Lewis, J. L	AMt. Holly Union
Littlejohn, H. N	A Evansville Washington
Maguire, Eva	A Fayetteville Washington
	A Mansfield Sebastian
Martin, J. T	. E . Baresville Indep'dence
Mathes, E. P	AOzarkFranklin
McCartney, Stella	A Fayetteville Washington
McClendon, L. E	AGrove RidgeBradley
McGehee, Abner	AMcGeheeDesha
McDaniel, V	A Fayetteville Washington
Mitchell, S. A	A Fayetteville Washington
Moore, Ethel	TBoonsboroWashington
Mooring, D. C	S Cotton Plant Woodruff
	A Fayetteville Washington
	AWagoner Ind. Ter.
	AElliottOuachita
	ADardanelleYell
Patterson, May	A DardanelleYell
	A Falcon Nevada
Phillips, C. O	. AFayettevilleWashington
	S DoverPope
	SFayettevilleWashington
	AFayettevilleWashington
	ESpringdaleWashington
	TMenaPolk
	EPottsLogan
	ABoonsboroWashington
	E Fayetteville Washington
	AFayetteville Washington
Rees. Margaret	$\dots A \dots$ FayettevilleWashington
Rife, W. B	TOsage MillsBenton
Rosser, Annie	A Fayetteville Washington
Shofner, F. E	AShawnee Oklahoma

Name.	Course. Post Office.	County.
Smithee, J. N	A Little Rock	Pulaski
Stotts, P. M	. A Hindsville	Madison
Stubblefield, Frank	E Fayetteville .	Washington
Thomas, Mabel	A Fayetteville .	Washington
Thurman, J. W		
Vandeventer, E. A		
Vaulx, Eleanor		
Vincent, C. P		
Waddell, J. B		
Walker, O. P		
Watkins, G. A		
Webb, Horace		_
Webster, Fay		
White, Catherine M		**
Whithorne, J. D.,	_	
Whitehead, A. D		
Wilson, J. R		
Wilson, Myrtie		
Winham, John		
Woods, G. G		

#### FIRST YEAR CLASS.

Abercrombie, BerthaAFayettevilleWashington
Adams, C. E A Love 1 Benton
Arnold, D. S
Baker, RiversAAlmaCrawford
Barton, Nora L
Bates, Beulah F
Baum, Harry
Beard, A. H
Beavers, J. W A Grand Lake Chicot
Beeler, L. L
Bell, Chas A Washburn Sebastian
Brownefield, MayA PhillipsLee
Brown, O.RAEvening Shade Sharp
Butts, MarshallECincinnatiWashington.

<sup>\*</sup> Deceased.

Name.	Cours	se. Post Office.	County.
Callahan, E. S	A	Warren	Bradley
Cathey, Florence	A	Fayetteville	Washington
Catlett, Hervey			
Cazort, C. A		Lan.a	Johnson
Chapman, J			
Conway, C. M	A	. Washington	Hempstead
Coulter, D. B	S	White Cliff	. Sevier
Courtney, J. G	E	Winchester	Drew
Cunningham, C. R	A	Dardanelle	Yell
Curry, R. E	E	Fayetteville	Washington
Davis, Barbara			
Davis, Edward A			
Davis, Lucy E			
Dowell, B. G			
Dowdle, J. H			
Diose, I sie	.\ .	. Lavette ille	. Washington
Dumas, C. R		. Lashot	. 1on
Edmiston, Maud E	A	Boonsboro	Washington
Elliott, J. P	E	Wewoka	Ind. Ter.
Ernest, H. B			
Falkner, I. H	A	Cherry Valley.	Cross
Fine, G. W	A.,	. Rudy	Crawford
Garland, M. H			
Garretson, W. B	A .	Fort Smith	··Sebastian
Green Joseph			
Graves, A. B	A .	. Lockesburg	Sevier
Gray, C. W	A	Little Rock	Pulaski
Hail, C. A	A.,	Williford	Sharp
Hall, S. M	E	Holly Grove	Monroe
Hall, W. A	A	Bentonville	Benton
Hamilton, Eileen	A	Fayetteville	Washington
Hamilton, Herbert			
Hamilton, Fred H	E	Nettleton	Craighead
Hasan, Alice			
Hanson, H. J			
Harding, Arthur			
Hare, J. A Harriman, F. R	E	Carmel	Chicot

Name.	Course	e. Post Office.	County.
Harrison, Ralph	A	.Fayetteville	Washington
Hawkins, R. E	A	.Brinkley	Monroe
Henry, Walter			
Herron, M. R	A.,	Bentonville	Benton
Heard, J. L	A	.Lono	Hot Spring
Hildreth, H.B			
Hoag, W. F			
Holcomb, G. R			
Horsfall, J. E			
House, J. W			
Hudgins, J. W			
Hudgins, Bessie			
Hudgins, Ora M			
Hudgins, O. W			
Humphreys, H			
Johnson, Xula A			_
Johnson, Hugh			
Kahn, E. H			
Kelly, J. B	A	.Brinkley	Monroe
Kimbrough, Daisy			
Kimple, Ben			
King, David			
King, Luther			
Kroeger, W. C			
Klyce, H. K			
Leverett, Nina D			
Lewis, J. J	A	.Maynard	Randolph
Lindley, L. T			
Martin, N. B			
Martin, Robert	A	.Little Rock	Pulaski
Maryman, T. W	. A	.Walnut Hill	Lafayette
Mathews, Lulu			
Mauney, W. J	A	.Murfreesboro	White
McDonald, Dee	s	.Lisbon	Union
McLaughlin, H			
McKean, J. P	T	.DeQueen	Sevier
McRae, C. L	. E	.11ope	Hempstead
McVay, Mattie	. A	Paris	Logan

Name.	Cours	se. Post Office.	County.
Malay, Cond	\	Paris	Logan
Miller, H. B	A	Clarksville	. · Pike
Mitchell, F. P	\	Brinkley	Мовтое
Mitchell, R. C	E	Gillett	Arkansas
Mitchell, B., Jr			
Mullins, G. W	S	Fayetteville	Washington
Murphy, Emma			
Nicher, Bessie	. \	Dardanelle	. Yell
Neclas, R. C	1	Carot	. Lonoke
Niman, Verbena	A	Farmington	Washington
Niman, Vienna			
Norman, C. S			
Patterson, J. B	S	Chidester	Ouachita
Patterson, T. J			
Paulie J. A			
Phillips, Grace			
Potts, Audley	E	Paris	Logan
Pivor, Rolla			
Ragland, H			
Ragsdale, W. E			
Reed, J. H			
Robinson, B. G			
Rollow, T. J	A	Quitman	Cleburne
Sassaman, R. S			
Scott, E. W			
Shepherd, W. L			
Skinner, H. L			
Smith, J. L			
Smith, C. F			
Stacy, M	s .	Vanndale	Cross
Thompson, Andrew			
Thurston, John			
Vauly, Gordon			
Wheeler, A. E			
Whitefield, A. J			
Wood, J. F			
Wright, W. II	S	Buena Vista	Ouachita
Wright, W. L	E	Hot Springs	Garland
Yates, Hazel			
7			0

### PREPARATORY SCHOOL.—Concluded.

### SUMMARY FOR SESSION OF 1898-'99.

#### BY CLASSES.

BI CLASSES.	
Second year	26
First year	24
Total	
BY COURSES.	
Aus 1	75
Scientific	2.1
Engineering	37
Teachers	1 9
Total 2	55
GENERAL SUMMARY, 1898-'99.	
Preparatory Students 2	55
Collegiate Students 2	
Total at Fayetteville 4	So
	oS
	76
Grand Total	6.1

## Ellumní Elssociation.

The object of this association is to maintain the interest of the graduates in the institution and bring them into closer relation with the University. To this end all graduates are considered members. The association usually holds a meeting during commencement week.

#### LIST OF ALUMNI.

- Don C. B. Aiken, C. E., So, Eng. Dep., Johnson Company, Johnstown, Pa.
- Edna Allen, B. A., '96, Teacher, Muscogee, I. T.
- L. S. Anderson, B. L. L., '84, clerk in Land Office, Washington, D. C.
- J. D. Arbuckle, B. A., '92, Principal Public Schools, Paris, Ark.
- C. F. Armistead, B. A., '93, Lieutenant in U. S. A.
- I. R. Ash, B. C. E., '13. Processor Mathematics, Coe College, Cedar Rapids, Ia.
- W. E. Ayers, B. C. E., Inspector St. Francis Levee, Osceola, Ark.
- W. H. Askew, B. A., '97, Law student, University of Virginia.
- Geo. H. Askew, B. A., '98, Merchant, Waldo, Ark.
- Ida Barr, B. S., '96, Mrs. R. E. Bagby, St. Joseph, Mo.
- C. P. Barnett, B. E. E., '96, Electrical Engineeer, Fulton, Mo.
- C. O. Bates, B. A., '83. Professor of Chemistry, Coe College, Cedar Rapids, Iowa.
- J. H. Bates, B. A., '86, Lawyer, Corsicana, Tex.
- Mary Beattie, B. A., '96, Teacher, Deat Mute School, Little Rock, Ark.
- M. L. Bell, B. A., '98, Protessor of Mathematics and Commandant of Cadets, Spears-Langford Military Academy, Searcy, Ark.

J. C. Bell, B. A., '94, Physician, Miss.

Nettie Barnett, B. L., '76, Mrs. C. E. Boles, Fayetteville, Ark. Blanche Bibb, B. A., '93, Mrs. G. A. Humphreys, New York.

J. W. Black, B. A., '92, Lawyer, McAlester, I. T.

W. J. Blackwell, B. C. E., '92, Engineer, Golden Lake, Ark.

Nora Blakely, B. A., '78, Mrs. H. M. Hudgins, Fayetteville, Ark.

W. P. Booth, B. A., '82, Farmer, Reyno, Ark.

Alice Borden, '77.

Laura D. Botefuhr,\* '75, Mrs. G. W. Schulte, Fort Smith, Ark.
Preston Bowles, B. C. E., '88, Kansas City, Pittsburg and Gulf
Railway, Lake Charles, La.

W. E. Boyd, B. A., '96, Law Student, Austin, Tex.

Amanda Braly, B. S., '96, Washington, D. C.

Etta Braly, B. S., '96, Mrs. Thos. McColloch, Boonsboro, Ark.

E. H. Braly, B. A., '94, Land Office, Harrison, Ark.

E. K. Braly, B. M. E., '97, Professor of Mechanics, Branch Normal College, Pine Bluff, Ark.

O. P. Brewer, B. S., '93, Webber's Falls, I. T.

A. M. Bixey, B. A., '96, Lawyer, Texas.

W. D. Brown, B. A., '82, Physician, Newtonia, Mo.

H. M. Butler, B. A., '79, Teacher, Arkansas.

J. L. Campbell, B. A., Journalist, Greenwood, Ark.

E. B. Carden,\* B. L., '77.

Ella Carnall,\* A. M., '81.

A. H. Carrigan, B. A., '82, Lawyer, Washington, Ark.

Ann E. Carson, '75, Mrs. John Knight, Jonesboro, Ark.

Augusta O. Carson, '75, Mrs. T. W. Cline, Downey, Cal.

C. K. Chanslor, B. A., '82, Lawyer, Grant's Pass, Ore.

W. R. Cherry, B. A., '82.

Jessie Cravens, B. L. L., '83, Mrs. O. Cravens, Neosho, Mo.

A. B. Crozier, B. E. E., '97, Electrical Engineer, Kansas City, Mo.

Wm. N. Crozier, B. A., '88, Missionary to China.

R. N. Cummings, B. A., '98, Medical Student, St. Louis. Mo.

Lula Curry, B. S., '92, Mrs. G. L, Teller, Chicago, Ill.

Mike Danaher, B. A., '88, Lawyer, Little Rock, Ark.

<sup>\*</sup> Deceased.

Hadge Davies, B. A., '93, Associate Professor of English and Modern Languages, University of Arkansas.

Lila Davies, B. A., '96, Fayetteville, Ark.

Lizzie P. Davis, '75, Mrs. R. C. Brown, Florence, Arizona.

W. E. Dixon, B. A., '88, Teacher, Waldo, Ark.

C. H. Drake, B. C. E., '91, and C. E., '94. Engineer, Helena, Ark.

N. F. Drake, B. C. E., Professor of Geology and Mining, Imperial University, Tien-tsin, China.

C. J. Drees, B. E. E., '96, Edison Electric Company, Little Rock, Ark.

G. W. Droke, A. M., '80, Professor of Mathematics, University of Arkansas.

W. H. Duncan, B. L. L., '84, Lawyer, Conway, Ark.

Mallie Dyer, B. 'A., '94, Professor of English and German, Florida State College, Tallahassee, Fla.

Clara Earle, B. A., '96, Instructor in English and Modern Languages, University of Arkansas.

W. L. Edmiston,\* B. L. L., '84.

Amanda A. Eld, B. A., '98, Teacher, Benton County, Ark.

C. J. Eld, B. C. E., '96, Assistant City Engineer, St. Joseph, Mo.

F. W. Ellis, B. A., '81, Lieut. U. S. Army, Fayetteville, Ark W. W. England, B. A., '83.

L. F. Fishback, B. S., '89, Lawyer, Wichita Falls, Texas.

J. C. Floyd, B. A., '79, Lawyer, Yellville, Ark.

W. M. Flynn, B. A., '88, Teacher, Kennedale, Tex-

J. R. Gannaway, B. A., '90, Lawyer, Member Legislature, Warren, Ark.

D. A. Gates, B. A., '84, County Judge, Desha County, Arkansas City, Ark.

J. E. Gibson, B. M. E., '94, Civil Engineer, Philadelphia, Pa.

W. P. Goodwin, B. L. L., '84, Lawyer, Warren, Ark.

Belle L. Gorton, B. A., '76, Author, Chicago, Ill.

C. D. Greaves, B. A., '83, Lawyer, Hot Springs, Ark.

Alfred W. Gregg,\* B. A., '76.

Andrew S. Gregg, B. A., '78, Physician, Fayetteville, Ark.

L. W. Gregg, B. A., '82, Lawyer, Fayetteville, Ark.

<sup>·</sup> Deceased

C. E. Hall, B. C. E., '93, Civil Engineer, Russellville, Ark.

H. J. Hall, B. A., '94, State Senator, Waldron, Ark.

W. J. Hamilton, B. A., '92, Teacher, Greenwood, Ark.

Agnes Harris, B. A., '76, Mrs. Johnson, Kansas City, Mo.

Sara E. Harris, B. A., '76, Mrs. C. P. Conrad, Osceola, Mo.

Grace Harrison,\* B. S.,'89, Mrs. T. L. Brown, Greenwood, Ark.

J. II. Harrod, B. A., '79, Lawyer, Little Rock, Ark.

J. C. Hart, B. A., '85, Lawyer, Dardanelle, Ark.

J. T. Hawkins, '79, Physician, Mount Holly, Ark.

J. D. Head, B. A., '94, Lawyer, member of Arkansas Legislature, Columbia, Ark.

I. G. Hedrick, B. C. E., '92, Firm of Waddell and Hedrick. Consulting Engineers, Kansas City, Mo.

W. Rhodes Hervey, B. S., '90, Lawyer, Santa Anna, Cal.

E. W. Hillis, B. L.L., '84, Lawyer, Jonesboro, Ark.

J. H. Hobbs,\* B. A., '88

Daniel Hon, B. A., '82, Lawyer, Waldron, Ark.

Cener Holcomb, B. A., '92, Instructor in University of Arkansas, Fayetteville, Ark.

Jobelle Holcomb, B. A., '98. Teacher, Fayetteville, Ark.

S. A. Horton, B. A., '91, Lawyer, Fairview, Ark.

J. W. Howell, B. L. L., '85, Cotton Buyer, Clarksville, Ark.

Willey Howell, B. S., '97, First Lieut. 4th Intantry, U. S. A.

J. H. Hudson, B. L. L., '84, Farmer, Dardanelle, Ark.

G. A. Humphreys, B. A., '90. Physician, New York City.

Edgar Jennings, B. A., '77.

Gustave Jones, B. L. L., '82, Lawyer, Newport, Ark.

Albert P. Johnson, B. A., '76, Lawyer, Winfield, Kan.

T. M. Johnson,\* B. L. L., '80.

G. H. Kimball, B. C. E., '92, Auditor of the D. & R. R. R., Dardanelle, Ark.

Artelle Alice King, B. L. L., '80, Mrs. J. C. Belt, Brooken, I.T.
E. B. Kinsworthy, B. L. L., '85, ex-Attorney General of the State of Arkansas, Lawyer, Little Rock, Ark.

T. B. Kitchens, A. M., '80, Merchant, Paragould, Ark.

Ella Lake, B. L. L., '84, Mrs. S. W. Barnett, Fayetteville, Ark.

<sup>\*</sup> Deceased.

W. H. Langford, B. A., '86, Banker, Member of the Board of Trustees University of Arkansas, Pine Bluff, Ark.

J. A. M. Lanier, B. A., '82.

Abbie Leverett, B. A., '94, Teacher, Georgetown, Tex.

Mary Leverett, B. A., '86, Mrs. J. A. Taff, Washington, D. C.

Rose C. Leverett, B. A., Fayetteville, Ark.

D. B. Lipsey, B. S., '96, Teacher, Texas.

W. Ross McCain, M. A. '98, student in Germany.

Eva McCart, '75, Mrs. D. M. Main, Cheney, Kan.

1 B. M. Datasech, B. A., Sz. Read & McDonough, Attorneys, Fort Smith, Ark.; Member of the Board of Trustees University of Arkansas.

W. R. McFarlane, B. A., '82, Lawyer, Greenwood, Ark.

Charles F. McKinney, '75, Traveling Salesman, Ozark, Ark.

John C. McNeeley, B. C. E., '89, Planter, Rackensack, Ark.

S. E. Marrs, B. A., '79, Editor of the Democrat, Fayetteville, Ark.

J. C. Marshall, M. A., '79, Lawyer, Little Rock, Ark.

Mack Martin, B. M. E., '91, Assistant Superintendent of Mechanic Arts, University of Arkansas.

Pearl Martin, B. S., '93. Teacher at Fayetteville, Ark.

Collin Massie, B. A., '77, Teacher at Fayetteville, Ark.

J. E. Martineau, B. A., '96, Law student, Little Rock, Ark.

J. F. Mayes, B. A., '83, Lumber Dealer, Fayetteville, Ark.

Dane A. McNeill, M. E., '97, Superintendent of Factory, Salem, Ohio.

W. M. Mellette, B. L., '77, Mellette & Smith, Attorneys, Vinita, I. T.

Mai Middleton, B. A., '86, Mrs. R. Chasteen, Fort Smith, Ark.

H. P. Moberly, B. C. E., '94, R. R. Civil Engineer, Longview, Tex.

Lucy B. Mock, B. A., '94, Professor in Gessamine College, Nicholasville, Ky.

E. L. Mock, B. A., '94, Prairie Grove, Ark.

J. F. Moore, B. S., '93, Assistant Chemist, Agricultural Experiment Station, Favetteville, Ark.

J. H. Moore, B. S., '93, Chemist, Solvay Process Company, Syracuse, N. Y.

J. I. Moore, B. A., '81, Lawyer, Phillips County, Helena, Ark.

J. L. Moore, B. M. E., '97, First Lieutenant Arkansas Volunteers, U. S. A.

Lucy J. Moore, '75, Mrs. Ross, Cincinnati, Ark.

D. C. Morrow, B. E. E., '97, Engineer, Eureka Springs, Ark. Mattie W. Morrow, B. S., '90, Teacher in Public School, Fayetteville, Ark.

Sara Mulholland, B. A., '86, Mrs. J. F. Mayes, Fayetteville, Ark.

A. J. Myar, B. C. E., '96, Engineer with St. Louis Bridge and Iron Co., St. Louis, Mo.

W. H. Neal, B. L., '76, Lawver, Van Buren, Ark.

A. J. Newman, B. A., '91, Lawyer, Little Rock, Ark.

George Nicholls, B. A., '98, Journalist, Helena, Ark.

E. P. Notrebe, '85, Physician, Kansas City, Mo.

T. F. Oats, B. A., '82, Physician, Mexia, Tex.

Ora Obenshain, B. S., '89, Teacher in Public Schools, Eureka Springs, Ark.

Ida Pace, B. A., '88, Mrs. A. H. Purdue, Fayetteville, Ark.

C. C. Patton, B. A., '91, Lawyer, Hillsboro, Ohio.

L. Alice Patton, A. M., '79, Teacher, Prairie Grove, Ark.

Mattie J. Patton, B. L. L., '80, Mrs. Dr. Chas. Jenkins, Denver, Ill.

Thos. A. Pettigrew, A. M., '78, Lawyer, Charleston, Ark.

Harry Pharr, B. C. E., '93, Chief Engineer St. Francis Levee District, Southern Express Building, Memphis, Tenn.

J. S. Pharr, B. A., '92, Civil Engineer, Southern Express Building, Memphis, Tenn.

J. W. Pickel, B. A., '82, Physician for Crystal Plate Glass Company, Crystal City, Mo.

R. T. Pittman, B. S., '94, Chemist, Sloss Iron and Steel Company, Birmingham, Ala.

Alice Polson, B. S., '88, Mrs. W. C. Hutchinson, 1409 Pendleton avenue, St. Louis, Mo.

W. W. Powell, B. A., '88, Lawyer, Batesville, Ark.

C. G. Price, B. A., '98, Mercantile Business, Newport, Ark.

W. E. Pruett, B. C. E., '97, Draughtsman Waddell & Hedrick, Kansas City, Mo.

Anna Putman, M. A., '75, Teacher in Public Schools, Fayetteville, Ark.

J. L. Redus, B. A., '96, Lead Hill, Boone County, Ark.

G. W. M. Reed, Jr., B. L. L., '84, Lawyer, Los Angeles, Cal.

Lina Reed, B. A., '81, Instructor University of Arkansas, Fayetteville, Ark.

Maggie Reed,\* B. A., '78.

O. S. Rieff, B. A., '81, Lawyer, Deputy State Auditor, Little Rock, Ark.

P. A. Rogers, B. A., '92, Farmer, Gravett, Ark.

W. A. Ross, B. A., '98, Acting Professor Military Science and Commandant of Cadets, University of Arkansas.

Z. C. Ross,\* B. A., '8o.

Lawrence Russell, B. A., '80, Lawyer, Russellville, Ark.

G. C. Schoft, B. C. E., '88, Civil Engineer, Babcock-Wilcot Boiler Company, Philadelphia, Pa.

G. C. Shell, B. L. L., '82, Lawyer, Lake Village, Ark.

A. W. Shreve, B. C. E., '91, County Surveyor, Washington County, Farmington, Ark.

H. B. Shreve, B. C. E., '91, New Mexico.

W. D. Simms,\* B. L., 177.

Alice Simonds, B. S., '96, Mrs. A. V. Smith, Springdale, Ark. J. E. Skelton, B. S., '97, Druggist, Corvallis, Ore.

G. V. Skelton, B. C. E., '91, Professor of Mathematics, Agricultural College, Corvallis, Ore.

Ida Slagle, B. A., '89, Mrs. Gilbreath, Siloam Springs, Ark.

A. V. Smith, B. A., '98, Principal of Public School, Springdale, Ark.

E. L. Spencer, B. A., '98, Principal of Public School, Waldron, Ark.

Henry Stroup, B. A., '83, Lawyer, Paris, Ark.

Wm. S. Sutton, A. M., '78, Professor of Pedagogy, University of Texas.

Albert Taft,\* B. C. E., '90.

J. L. Taff, B. A., '84, Principal Public School, Austin, Tex.

Mary Taff, B. A., '89, Mrs. G. V. Skelton, Corvallis, Ore.

Lou Taliaferro, B. L. L., Stenographer, Kansas City, Mo.

<sup>\*</sup> Decembed

#### LIST OF ALUMNI.-Concluded.

- E. L. Taylor, B. L., '76, Lawyer, Bentonville, Ark.
- C. V. Teague, B. A., '79, Prosecuting Attorney, Hot Springs, Ark.
- B. J. Tillar, B. A., '86, Capitalist, Fort Worth, Tex.
- 1 N. Tillman, B. L. L., '80, ex-District Prosecuting Attorney, Lawyer, Fayetteville, Ark.
- Lee Treadwell, C. E., '88, Engineer, Kansas City, Mo.
- S. C. Treadwell, B. A., '94, Lawyer, Tishomingo, I. T.
- A. M. Vance, B. C. E., '93, Pierce City, Mo.
- James Vandeventer, B. S., '93, Bookkeeper, Fayetteville, Ark.
- George Vaughan, B. A., '96, Lawyer, Lockesburg, Ark.
- Julia Vaulx, B. A., '92, Teacher, West Orange, N. J.
- S. F. Vaulx, B. A., '92, Memphis, Tenn.
- Katherine D. Vaulx, B. A., '97, Teacher, Benton. Ark.
- Annie Waggener, B. L., '77, Mrs. Marcus, Cincinnati, Ark.
- W. J. Waggener, A. M., '76, Professor of Natural Philosophy, University of Colorado, Boulder, Colo.
- J. V. Walker, B. A., '77, Lawyer, Fayetteville, Ark.
- C. A. Watson, B. A., '77, Teacher, Fayetteville, Ark.
- J. J. Watson, B. A., 'Sr, Teacher, California.
- G. A. Warren, B. L., '88, Physician, Imboden, Ark.
- J. N. Wheeler, B. A., '90, Capitalist, Warren, Ark.
- Hattie E. Williams, B. A., '98, Teacher, Fayetteville, Ark.
- Naomi J. Williams, A. M., '80, Instructor in University of Arkansas.
- Jennie Williams, B. A., '96. Teacher, Imboden, Ark.
- R. H. Willis, B. A., '88, Ph. D., '96, Principal Girls' School, Chatham, Va.
- A. C. Wood, B. M. E., '92, Engineer, Philadelphia, Pa.
- B. F. Wood, B. E. E., '93, Electrical Engineer, Philadelphia, Pa.
- C. D. Wood, B. A., '79, Associate Justice Supreme Court of Arkansas.
- W. H. Woodall, B. A., '85, President of Female College, Lake City, Fla.
- C. D. Woolverton, B. L. L., '85, Principal of School, Sheridan, Ark.

NOTE—The President will be pleased to receive information as to the address and occupation of those members of the Alumni for whom these data

omission or errors in the foregoing list, or any changes made during the ensuring year.

<sup>\*</sup>Deceased

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SOPHOMORE.	Chemistry 2, M., F.   History 1, T., T.     1. Chemistry 3, T., Th   German 2, M., Physics 2, M.   Mathematics 4     2. E. E. 2, F.   Chemistry 4, M.     Pedagogy 3 an	F. French 1, T., Th., F. Geology 1, M., W. Th. Agriculture 2, T., Th., F. M., T., Th. M., W., F. Id 4, M. F  Ghemistry 5, M., T., W., Th. Blology 5, M., W.	Biology 4, F. Geology 1, F. Mathematics 3, M. Mathematics 5, W., F.	English 2, M., W., F., Mathematics 3, T., Th., Geology 2, M., W., F., C. E. 2, F.		M. E. 1, T., F		
JUNIOR.	Latin 4, M., W. History 7, M. German 3, M., F. History 8 and 5 Spanish 1, M., W., F. Economics 7 ar Mathematics 6, F. 1. Chemistry 3 Biology 7, T., Th. Biology 10, T., Biology 8 and 9, M., W. E. E. 7, M., T. Pedagogy 5 and 6, M. F. M. E. 4, M., T., W., Th. M. E. 6, S.	T. Th. Greek 3 M., T., Th. W., F. History 3, M., T., Th. W., F. Economics 2, 3 & 4, M., T., T. German 4, M., W. 9, W., F. 1. Chemistry 14, F. and 8, M., W., F. 2. E. F., Th., F. 14, T., Th. M. E. S., M., T., W. Th. C. E. S., W., Th.	Latin 3, W. English 3, T., Th. Denglish 4, M., F. French 4, T., Th. History 4, M., Th. History 5, F. History 6, T. Biology 10, T., Th. Philosophy 2, T., Th. Philosophy 3, M., W., F. Mathematics 6, T., Th.	English S, M., F. German S, W., French 3, T., Th Economics S and 6, M., F Chemistry 7, M., W., Th, M. E, 4 (a), M., T., V., M. E, 1, Th., F. C. E, 6, F.		E. E. 3, M., T. C. E. 8 (a), M., T. M. E. 3, M., T.	French 5, T. Mathematics 7, W., Th. Mathematics 8, M., T., F	
SENIOR.	Latin 5, T., Th., F. Chemistry 10, English 7, W. 2, E. E. 10, Th Spanish 2, T., Th. C. E. 11, W. T Economics 9 and 10, T., Th. M. E. 13, W. E. E. 8 and 9, M., T. M. E. 7, M., T. C. E. 11, W., Th. M. E. 10 or 11 C. E. 10, M., T., W., Th. M. E. 6, S	M. E. 12, Th., F. Th. M. E. 8 or 9, Th. F. W. M. T.	English 3, T., Th. English 4, M., F.	Spanish 2, F. Philosophy 4, M.  E. E. 6, Th., F. C. E. 16, Th. C. E. 15, F.	I G	E. E. 4., M., T., C. E. 13, M., T M. E. 7 and 13, M.		